MARCH · 1937

AMERICAN GAS ASSOCIATION
LIGHT
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1919

Third Edition

HELPFUL HINTS FOR VOLUME COOKING BY GAS

A Practical Check List for Commercial Gas Kitchen Operators

Written from the viewpoint of hotel and restaurant managers, this thirty-two page, illustrated booklet prescribes remedies for the most common complaints arising in the operation of commercial kitchens. It shows how to improve service rendered by gas and heighten the satisfaction experienced by gas customers. The all too-common wasteful practices are illustrated and improvements described.

It is suggested that all gas companies consider the use of the booklet for their hotel and restaurant division as a salesman's piece to be personally presented or distributed via meter readers to each large volume cooking customer. Properly followed up by the salesman, this booklet should prove helpful in securing greater acceptance of gas fuel for this important market.

That these "helpful hints" fill a long-felt need is indicated by the fact that 25,000 copies have been distributed by gas companies to their commerical cooking customers within the last four months. Many have found it necessary to reorder, so great has been the demand.

Prices are as follows, F.O.B. New York:

25 copies	$ 3.75
50 copies	6.00
100 copies	9.50
500 copies	40.00
1,000 copies	75.00

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AMERICAN GAS
ASSOCIATION
MONTHLY

James M. Beall, Editor

Minding the Gas Business

SPEAKING before the New England Gas Association, February 11, President Russell urged the gas industry to pay less attention to the other fellow's business and more to our own. The industry needs to devote more effort to selling and advertising its own product, "It needs sales-mindedness, color, showmanship," he stated. We quote President Russell further:

"The gas industry is noted for the development of manufacturing processes that have placed that industry in the foreground of economic practices. The gas engineers have recognized and accepted a responsibility to the general public and have produced a utility that is outstanding in its record of service to its customers.

"Credit must be given to these engineers for the development of the industry to this high standard. Engineers, by nature and by training, deal with facts that can be proved and their effects predicted to an amazingly accurate degree. For the most part they are inclined to believe that facts, being facts, need no explaining, no justification, no selling and therefore that the facts cannot possibly avoid being accepted by anyone knowing them.

"No one can dispute the importance of engineering; but what may be questioned is the tendency to carry engineering practices from a provable and predictable field into selling which is a field of personal prejudice, style consciousness and individual vagary.

"Unfortunately, human beings do not react according to any formula appearing in a handbook. The psychologist is a different breed from the engineer—not better, not worse, just different.

"The weakness in the gas industry is not in gas, but in how those of the industry have failed to do the right thing for gas. We have been tried and found guilty of a lack of sales-consciousness. The lack is not essentially in salesmen, we hire them and they sell gas appliances; it is not in advertising, except in quantity, because we buy advertising space and patronize the same advertising agencies other industries use; it is not in appliances because gas appliances are, on the whole, just as good and in some cases much better than comparable electric or other appliances.

"We can go so far as to admit that we need more salesmen, more advertising and even better appliances; but these conditions will not overcome a lack of sales-consciousness. Let's do a little digging into our mental attitude toward the world in general and our domestic customers in particular.

"There isn't a single reason why we have to take a back seat in recommending that our customers use gas for cooking, refrigeration, heating water or heating their homes. Our home service, sales and house heating departments have proved time and again gas is best, and yet we approach the home with our goods in an apologetic, timid, negative attitude. Suppose for the moment we forget the manufacturing and distribution, the economics and engineering, and talk to and about this domestic customer, the housewife."

After discussing this new attitude in relation to each domestic gas use, President Russell concluded: "We must learn to be gas artists. The home is our canvas—we need to paint the picture of gas on this canvas in colors so bright, detail so vivid, background so pleasing, that the effect will be everlasting in the mind of the housewife and the family. Their happiness is our business—let's mind it."

A. G. A. Convention Week of Sept. 27

Cleveland, Ohio, was selected as the place of the nineteenth annual convention of the American Gas Association at a meeting of the Executive Board, Feb. 17. The date was changed from the time previously announced to the week of Sept. 27.

Holding the convention in Cleveland will give visiting delegates an unusual opportunity to inspect the A. G. A. Testing Laboratory located there. The major portion of the program of testing and certification of gas appliances is carried on at the Cleveland laboratory, in addition to an extensive research program. About 93 per cent of the gas appliances now sold annually in the United States and Canada are approved by the Association's laboratories.

National Advertising—Today and Tomorrow

By BERNARD J. MULLANEY

Vice-President, The Peoples Gas Light and Coke Co., Chicago, Ill.

B. J. Mullaney

MY thanks to your program makers for their succinct phrasing of my assignment here: "National Advertising—Today and Tomorrow." Those five words put the spotlight on a situation of more than superficial import.

Today we *have* National Advertising. For years we have been telling one another that "something must be done." We are now actually getting it done, and pretty well done.

For tomorrow, all of us who believe in advertising—and I assume we all do—want more of it. And the one sure way of getting more of something we want is to show those who can give it to us that we are making good use of what we already have, and that we know how to make good use of enlarged resources and opportunities.

Managerial Attitude

A geography teacher was testing his pupils on what they had learned of lands and waters to the south of us. He asked them how they would go from Chicago to (say) Peru in South America, and what they might see on the way. One lad—more "smart-alecky" than really smart—responded that he would get on a Peru-bound ship and then would "leave it to the captain." This lad missed the point that by taking thought he could have a choice of routes or route-combinations, and see and learn much on the way.

Managerial attitude toward advertising is sometimes like that. It does not hook up with the advertising and go along with it in the variety of ways that can be devised. The advertising is left to work out its own salvation—is left to prove itself, alone and unaided—in definitely promoting sales.

A sales manager who just hires a band of canvassers, and turns them loose without supervision and without help in rounding the corners and working the angles that inevitably occur, soon finds that he isn't breaking any selling records. To get satisfactory results, he has to work *with* his salesmen, and not leave them in the state of just working *for* him.

Teamwork

So with advertising as an adjunct to sales promotion—for that is all it is, an auxiliary. Direct and positive results that can be tabulated from day to day are scarcely to be had from it except in certain specific instances, like mail order and bargain-price advertising. In general advertising—and our gas industry campaign is of that class—the power of the advertising is applied more or less indirectly. The effect of it has to be localized and focused, for translation into specific sales. Therefore, the closer the co-operation between the general advertising and the local sales effort, the better the results.

The trick is to make the general over-all campaign and the local sales effort work as a team. Obviously, the better each element in the team understands the purposes and functions of the other, the smoother and stronger will they pull together.

In every discussion of advertising for the gas industry in the last twenty years, we have heard this: "Gas and gas service are an old story. They are taken for granted. There is nothing new in them to get them talked about—nothing of the romance and the 'magic' appeal of electricity, for example."

Our national advertising is changing all that, as I may be able to show you more definitely in a moment. It is getting gas and the use of it talked about. That is the general over-all purpose of it—to get attention and arouse interest. It remains for the local effort—for us gas company people in our respective communities—to localize and focus this interest on where the thing talked about can be seen and bought. And for this localizing and focusing job, we have local advertising, salesmen, dealers, show rooms, display windows, fellow employees, and so on.

Successful national advertisers recognize this principle of making their national advertising and the local sales-effort work as a team. Their selling campaigns from season to season and year to year are organized and executed to apply this co-operative team work. The broad function of their general advertising, as of ours, is to create a favorable "atmosphere," so to speak, in which local effort and personal selling can operate more easily and effectively.

Creating "Atmosphere"

An illustration, by analogy, always comes to mind when this "atmospheric" phase of advertising is discussed. Some years ago we in the Peoples Company were preparing to broaden and intensify the push for industrial business. Advertising was in consideration. But what kind? Aimed at whom, and in what kind of media? Most of us obviously were thinking only of higher executives—production superintendents and plant managers and company officers whose O.K.'s or signatures would have to be obtained. Finally the most experienced sales promoter in the group said to us: "The horizon of your outlook is too narrow. Practically everybody in this city that ever gives a thought to gas service, thinks of it in terms of the kitchen stove. What you need is a background, an 'atmosphere'—a community recognition and acceptance of gas as a fuel, —and even more than just a fuel—

Address delivered before Mid-West Gas Sales Conference, Chicago, February 18-20, 1937.

recognition of it as a tool in the industrial processes that call for applications of heat."

Well, the upshot was advertising to the entire community that you could "do it better with gas," in the shop and factory as well as in the home. Probably not one sale could be traced directly to that advertising. But the Industrial Department soon found itself working in an "atmosphere" of acceptance so favorable that everybody concerned was well satisfied.

Collateral Attention

In much the same way our national advertising and its auxiliaries are cultivating an "atmosphere" favorable to selling gas service and gas-using appliances. They are preparing the way for the gas industry, and for each individual company, to consolidate the position of gas service in the face of competition, actual or potential, and to push on for expansion. A word about the auxiliaries may be in order here.

In times past every enthusiastic gas man has ground his teeth over the lead his electrical competition seemed to have over gas in getting into print. Our national advertising and its auxiliaries are changing all that—are doing it logically and naturally and ethically.

Our national advertising has "put us on the map." It has lifted gas service out of the taken-for-granted class. It is showing that gas service is an up-to-the-minute service in the general scheme of things, not a left-over from the horse-and-buggy period, and that the use of it to enhance the comfort and convenience and satisfaction of daily home life has been made as modern and effective as the latest model of radio set or motor car.—B. J. Mullaney.

I am not one to suggest that purchase of advertising space entitles us to free publicity in the reading matter columns of publications used, or that purchase of space will get that publicity for us. We get all that we are entitled to when we get the space for our copy. But when we use the space as it is being used in our national advertising, and then team it up with the collateral attention and effort that experienced advertising and publicity men know how to apply, we do get helpful publicity as surely as daylight follows dawn.

We *are* getting it, too—in national women's magazines, in newspapers, and elsewhere. I am not going into boastful statistics on number of clippings, circulation of the publications clipped, lineage, and all that. I mention just one fact, which should be sufficiently illustrative for present purposes.

According to the best check-up we can get—and it is by no means complete—the ratio of articles on gas to articles on electricity, in publications of the kind indicated, is getting close to a fifty-fifty basis, which is immensely better than it used to be. As examples of what I have indicated, I would direct your attention to the articles in the February *Delineator*, the February *Ladies Home Journal*, and the just out *McCall's* for March.

Tie-Up Advertising

Then there is the play the gas industry can get, and is getting, in the advertising of other industries and businesses—makers of equipment and appliances, food stuff manufacturers, and so on. For another example, take the movies, and the utilized opportunities for making sure that when a range or other appliance appears in pictures it is up-to-date and attractive, and not a relic.

These are intangibles. They do not figure in sales statistics. But they are selling aids in the same way that a smile and a pleasant, easy manner are.

We do not always realize how the advertising and its auxiliaries operate —how they work for us in our local territory. When we apply some thought to the matter, with due recognition of how human nature works, we can see how they help each of us locally, even though they do not bring in specific sales that we can tabulate as results of a particular advertisement.

The collective human mind is scatter-brained. The characteristics of the times make it more so. The pressure of personal concerns, plus the distractions of this jazz-movie-radio age, leave mighty little room for mental concentration on advertising or anything else, outside the interests of the moment. But in spite of distractions, people do get impressions and impulses and opinions that affect what they do.

Above is shown an effective painted sign which ties in with the national advertising program. Located on the wall of one of the largest hotels in Providence, R. I., this advertisement has a verified circulation of 35,000 pedestrians a day. Automobile traffic is also very heavy in two directions. It is closely adjacent to Rhode Island's largest department store where modern gas ranges and gas refrigerators are sold and but two short blocks removed from the Providence Gas Company building. It is illuminated at night by reflected lighting from below.

It is also reported by J. L. Johnson, sales manager of the Providence Gas Company, that the garage opposite the hotel will carry a sign on gas refrigeration, which will tie in with the national campaign. In effect, these two signs will give gas almost exclusive display space on one of the busiest streets in Providence.

These four little girls from Ware, Mass., ranging in ages from 9 to 12 became so interested in listening to the Mystery Chef radio program that they decided to be artists at the gas range. Their first effort resulted in the baking of four perfect cakes. George Oliver, manager of the Ware Gas Company, displayed the cakes in the office window of his company and they attracted wide attention. The gas ranges used in baking the cakes were insulated and equipped with heat control. The recipes were taken from the Mystery Chef's cook book. Shown in the picture are Mr. Oliver, Olive VanWart, 10, Irene Cebula, 12, Alice Marie St. George, 9, and Mary Clark, 11

These are picked up from things read and seen and heard, here and there, without the picker-up being able to identify their sources, and they evolve into interest and action.

Our national advertising has "put us on the map." It has lifted gas service out of the taken-for-granted class. It is showing that gas service is an up-to-the-minute service in the general scheme of things, not a left-over from the horse-and-buggy period, and that the use of it to enhance the comfort and convenience and satisfaction of daily home life has been made as modern and effective as the latest model of radio set or motor car.

When an industry or a service is thus "put on the map," the editors and their helpers, who produce publications, are quick to see it. Seeing it is the basis of their jobs. They are paid to recognize that which is likely to be of interest to their readers, and they are prompt to act accordingly and help spread the news.

What follows comes as naturally as the gas-jet responds to the range top-lighter. When, for example, Mrs. Green, Mrs. Brown, Mrs. Black and Mrs. White finish the bridge game and chat about home affairs, as they mostly do, one or another is bound to interject an observation, a statement, or a question originating somewhere along the line in what the national advertising and its auxiliaries have been doing.

The rest of it is up to us of the local gas companies, and to what we have done by tie-in to localize and focus the general campaign. If we have done a good job, Mrs. Green, Mrs. Brown, Mrs. Black or Mrs. White will connect up the bridge table interjection with something she has seen, read or heard locally—in an advertisement or other print, at a salesroom, from a salesman, or from a neighbor—about ranges, refrigerators, water heaters, or house heating. And from there on, helped along by consistent sales promotion, the progress is from interest to action that puts figures on the sales report.

The nub of these sketchy and rambling observations is this: let us "get religion" on this National Advertising Campaign, and tie in our local efforts with it—not in just one or another detail, but in all conceivable ways—in our local advertising, in our sales programs, in our contacts with other dealers. Don't overlook fellow employees.

Our fellow employees are in circulation among potential customers all the time. They like to talk, as most of us do, and again as we all do, they like to talk about the business they are in. They like to tell things about it that their friends don't know. This up-to-date gas service topic, when made clear to them, gives them a chance to get enthusiastic, maybe a little boastful, about the business they are in. And in the doing of it, they are not only promoting sales but are also increasing their own interest and confidence in the business.

Get the gas appliance manufacturers interested also. Some of them are fully awake to the opportunity, are doing as well as could be expected to utilize it, in present circumstances, and want to see more done. But there is a large and uncultivated field here for cooperation from the manufacturers, and some nudging from their gas company customers should help open it up.

Local Activity Essential

I am not saying any of this because of a doubt of the local cooperation the national campaign is getting. I am only trying to emphasize the value of complete local tie-in with it—to suggest that local co-operation and tie-in is a continuing job week after week, not something for just one-time attention. For the national advertising is not an independent effort, a thing apart from our local effort to be left to go its own way. Its purpose is that of a back-log in the fires of local activity, and the details of it are planned to that end.

Nor am I setting myself up to give you a formula for tying in. A general formula would be only a waste of words. Each of us has at home circumstances and conditions peculiar to our respective situations. The local co-operative tie-in has to be adjusted to those circumstances and conditions by us who are on the job in each individual company.

Through A. G. A. headquarters and the committee that is directing the national campaign, there is available an abundance of tie-in suggestion and tie-in material. Adequate use of it will wipe out all doubt of what to do about "National Advertising—Today and Tomorrow."

Left—Jack shows Mrs. Lee and her daughter, Joan, how to modernize their home with gas

Showing off a model of the prize-winning home design which calls for all-gas equipment

A. G. A. Movie to Aid Gas Sales

PICTURED on this page are four scenes from the talking motion picture, "The House That Jack Built," which has just been produced in Hollywood and is available for distribution to gas companies after March 1. The picture, which is designed to further the use of gas in the modern American home, has been prepared under the supervision of a committee representing the Commercial Section and the Publicity and Advertising Committee.

The story of "The House That Jack Built" was cleverly constructed to include the modernization of an old home with gas and the building of a complete model house, also fully gas-equipped. The latest word in settings has been used and the cast is made up of prominent Hollywood players.

Briefly the story involves the experience of a young architect, Jack, who modernizes the home of his friend, Mrs. Lee, showing how successfully this can be done with modern gas appliances. This leads to Jack's entrance into a home design contest being conducted by a real estate operator. Jack designs a beautiful model home which wins first prize, and, incidentally causes him to be entertained royally at the real estate operator's home. The love interest is furnished by the secretary, Joan, and the real estate dealer's daughter, Sandra. There are many complications and sidelights to the plot, but the main theme brings out forcefully the advantages and convenience of modern gas appliances.

The picture takes 45 minutes to show and is especially suitable for showings to gas customers and prospects. It is available at the cost of films, without any charge made for production costs, which ran into thousands of dollars. Further information can be secured from the Commercial Section, A. G. A. headquarters.

A party scene in the picture

The final scene—Jack and Joan get the deed to the house he designed

Gas Refrigerator Objectives for 1937

By GEORGE S. JONES, JR.

Servel, Inc., Evansville, Ind.

George S. Jones, Jr.

FOR the first time in the life of our industry, we have an offensive weapon to use—the gas refrigerator. Gone is the lighting load that was first ours, to the challenge of the electric utility. Our cooking load has been challenged with some success and even our heating load is subject to raid. All these formerly were ours exclusively, developed to a large extent by the gas utility.

An Offensive Weapon

The automatic refrigerator on the other hand was developed by the electric utility and challenged by us in 1926. Today, ten years later, the 1,000,000th gas refrigerator unit is coming down the assembly line as we stand here, and we are unquestionably the fastest growing member of the refrigeration industry. In this you must be interested—in you we are interested. What is more natural then that we should meet here today and discuss our common objectives for 1937?

For ten years we have been manufacturing the gas refrigerator. This year we celebrate our tenth anniversary and we welcome you all to our birthday party, a real party with cakes and candles and all the joyousness of such a festive occasion. Joyous for many reasons—ten years of joint effort on your part and ours—the black days of the depression pretty well back of us—most of our problems pretty well in hand. During these ten years, we have had to follow some pretty definite policies to keep afloat. These policies by their very definiteness have created some misunderstanding. We have been accused of trading on the fact that we were the only manufacturer. We have been called arbitrary and high handed because there were no competitors. I think you are due an explanation. I think we are entitled to a chance to report to you on the stewardship that has been ours.

Each year we have produced more and better gas refrigerators—to build better acceptance of gas as the modern fuel—to create more good will for gas appliances and for the gas utilities. There have been lean years but in the one just ended the company making your gas refrigerator made a profit of over four million dollars. What does this mean to you? Primarily it means that you and we together have created a public acceptance of a product that has made such a profit possible. It means that there are funds for engineering research and development out of which will be born constant improvement and in turn increased acceptance. It means permanency, stability. It means the ability to give service down the years and to keep the refrigerator serving its purchaser and consuming your fuel. Surely that is an accomplishment no one will begrudge and one that pleases every man in this audience.

Gas Refrigeration Gains

Furthermore, we feel that our stewardship is further justified when I quote a survey made by *Time* and just completed. This survey shows that the gas refrigerator increased over 60% last year in its percentage of preference over electrics while the gas range actually lost ground. I mention this to prove that the manufacturer of a product exclusively by one company is not necessarily wrong, for there are many capable and aggressive gas range manufacturers.

In the history of the gas refrigerator there have been four important steps.

1st The purchase of the rights to manufacture in this country in 1926.

2nd The development of the air cooled feature in 1933. The elimination of the water jacket and the real opening up of business nationally for all of us.

3rd The change in design in 1935 when the cabinet and unit were designed for each other instead of applying a cabinet really designed for electric units.

4th The present design—radically different, radically improved—carefully thought out and produced in what we firmly believe to be the world's most modern and efficient refrigerator factory.

Improving the Product

May I say a word right here about what has been accomplished in Evansville in the way of plant management and design? Since 1933 wages have gone up with the cost of living. Materials that constitute the major portion of our refrigerator have gone up 10%. The amount earned per man has gone up 12½%. But with a product definitely improved in design, in appearance, in performance and in efficiency, the actual cost per cubic foot to you of the gas refrigerator has decreased 12½%. Surely to be able to say that and to remind you of the profit that was made at the same time is to further advance our claim of adequately accounting for our responsibility in making your refrigerator.

As to distribution, to selling. We are part of that. Our advertising continues to be the most adequate we can possibly justify. This year we again blanket the nation, beginning with the *Saturday Evening Post,* already out on January 30 and carrying three distinct appeals to three distinct income brackets. We have realized the same copy does not appeal to all classes. Our sales promotion plans are now completed including by far, the greatest A. G. A. campaign we have ever been a party to. You might be interested in knowing that our field personnel has tripled since 1933.

And now for your part. We have some very definite ideas on that subject; ideas developed in consultation with the executives of your companies, tried and modified, changed and improved and tested. We have talked to

Part of address before Eastern Regional Natural Gas Sales Council, Pittsburgh, Pa., February 4-6, 1937.

most of you individually and I would like to sum them up here.

First. The gas refrigerator has outgrown its swaddling clothes. It is a big industry and must be handled as such. It is no longer fair to you nor to us to simply place it on your floor as another appliance and depend on partly trained and part time men to handle it.

Second. It should be considered as one of two refrigerators made instead of one of many.

Let's take that second statement first. There are some thirty manufacturers of electric refrigerators but they all use electricity and can only be sold where electricity is available. That's their market. But what about the gas refrigerator? What is its market? Surely, every home where gas is available—and there are almost as many gas meters in this country as there are electric meters—is a prospective gas refrigerator home. Suppose all electric refrigerators had the same name plate—would you as sales executives for your gas company be content with a paltry 10% or 20% of the total sales? There are as many people interested in the gas industry in this country—in round numbers—as there are those interested in the electrical industry. You as an industry are therefore entitled to 50% of the business. Why not set that as your objective—not for 1937 perhaps but later.

Man Power Needed

Now then, suppose we agree that we have as good a refrigerator, with as universal appeal as any other. What is the most important factor in reaching that goal? Obviously it's adequate man power—trained man-power. Who is selling the electric refrigerator? Every electric utility plus thousands of dealers. Now then, isn't this a fair question? How can the gas utility in any given territory expect, of themselves and by themselves, to put as much man power in the field as does the electric utility plus the dealers? And that brings us to the first part of this distribution problem—more and better trained salesmen.

We have been asked in recent months if we were going away from utilities. Let me be as positive in this as it is possible to be. We are *not*. We must have the utility support. In a few instances, in Oklahoma where the utility is prohibited from selling, in some combination properties who do not care to sell gas appliances, in a scattered few places, we have been forced to seek other outlets. At other places the utilities themselves have requested that distributor and dealers be appointed. With the assistance of the utility from every possible angle these operations have been successful almost without exception.

Now what are the handicaps that we would like to define and if possible get a remedy for?

First—The actual difference in man power. The remedy there is obvious although not always practical. More men working for the utility or for dealers or both.

Second—More hours per man per year.

The remedy here can be applied along several lines. There is a great need for full time refrigeration salesmen the year round instead of taking them off entirely at certain times of the year. It is our recommendation that a minimum number of men be put on each appliance the year round with additions during peak seasons. Also remember that your dealer salesman as a rule works more hours per year on refrigeration than does your utility salesman.

Third—Better trained salesmen. I'm going to say something here that may sound wrong and out of place. It's only because I am convinced after over ten years personally in this business that I'm right do I dare say it. The average utility executive will not allow the opportunity for training that most dealers and distributors do. They will not permit the men to attend schools and conventions for training in any one appliance. The average utility salesman in my opinion is a higher type man but the very nature of his supervision and working conditions usually results in him being a Jack of all Trades and refrigerators are not sold that way.

Fourth—Too often the utility who appoints dealers is influenced by politics. It is very definitely our recommendation never to place the gas refrigerator on sale with electric refrigerators. The story is different, the refrigerator is different. Usually you will find that dealer sitting calmly down until advertising and publicity has driven in a prospect and he sells what that prospect has already been sold on. Remember the sum total of advertising on the part of your competitor—that is all electric refrigerators—is such that we could never hope to equal it—to drive in 50% of the prospects already sold on gas refrigeration. We must insist on salesmen with a single purpose.

Five-Month Refrigerator Sales Campaign Opens March 1

THIS year's national A. G. A. refrigerator selling contest will take the form of a "giant birthday party," as the campaign will celebrate the tenth anniversary of the marketing of gas-operated refrigerators by the gas industry. The drive is officially called the "Tenth Anniversary Campaign," and is held under the joint auspices of the A. G. A. Refrigeration Committee and the Association of Gas Appliance and Equipment Manufacturers in collaboration with Servel, Inc.

Cash awards amounting to approximately $40,000 will be distributed to winning companies and gas appliance salesmen who participate in the campaign. The competition will last five months this year, instead of three, as in other years, March being devoted to a "warm-up" period, and July to a "clean-up" campaign. The intensive months will be April, May and June, as hitherto, to correspond with the regular Spring and Summer season conducted by the refrigeration industry. There will be 2,000 cash awards in all, mostly for the salesmen, and a "big slice" of this reward for successful salesmanship will be distributed at the end of this month.

The symbol of the 1937 contest will be a one-hundred-pound birthday cake. Twenty-eight of these great gastronomic trophies, will be baked in gas ovens and presented to the companies which are triumphant in the campaign. Therefore nearly a ton and a half of batter will be used for this memorable event, which is probably the largest amount of batter ever used at one time in birthday cake-baking. It is expected that winning companies will display the "big cake" in salesrooms and duly celebrate the occasion.

Fifth—and finally—price differential. I'm not going very far in that discussion. Suffice to say the dealer can only survive on adequate markup. If local conditions justify it, the markup should be enough to give the dealer an opportunity. If local conditions do not place us in such a favorable condition then other ways must be found, or volume inevitably must suffer. This can only be decided locally. All I ask is that when you consider your problems you also consider ours. It is entirely possible that local conditions must be subordinated to the overall picture. If we can depend on you to meet us at this point, realizing that economically unsound conditions are never permanent, then I am sure there will be no trouble in working out the answer we all want.

And so in summing up, may I repeat that 1937 Gas Refrigeration Objectives brought down to cases are:

1. Constantly improved product.
2. More and better trained selling men.
3. An increasing percentage of the replacement market. I have not touched on this. It is a tremendously interesting subject all its own. May I say this—shortly now refrigerators will be replaced by the hundreds of thousands yearly. Ours—of all—has the greatest appeal to this market, a market consisting of people who know what they want and can pay for it, people who are familiar with all the advantages of automatic refrigerators and the disadvantages of mechanical. Mr. Ruthenburg has said that if we get 25% of the new business, we should get 50% of the replacement business in 1937.
4. And for the consumption of this convention, a better understanding of each other, a clearer picture of each other's problems, a realization that ours is a partnership unlike any ever existing in industry. If this is the result of this year's work together, we not only will accomplish all objectives in 1937 but will build a foundation on which greater and greater objectives can be established and accomplished with each succeeding year until our half of the total market is a definite accomplishment.

No heroics, no flag waving, but in my opinion, the gas house gang is on the way. We want to go with you. We want to be part of it.

Company Report Boosts A. G. A. Advertising Programs

PRAISE for the A. G. A. national advertising program, the Mystery Chef radio program, and other information in addition to a statement showing improved earnings, were contained in a report to stockholders of the Portland Gas and Coke Company, Portland, Oregon, February 1 by Paul B. McKee, president. Following are excerpts from the report.

"An example of the economy of all-gas service, taken from the company's records, is a Portland customer who has a 5-room house heated by a gas furnace. Gas is also used for cooking, water heating and refrigeration. There are five in the family. Last year the total bill for this complete all-gas service was $116.99, or only $9.75 a month. The customer used 203,000 cubic feet of gas during the year, which was bought at an average cost of 57.6 cents per thousand under the company's combination service rate schedule. This is an unexcelled value. Many customers served under this schedule earn even a lower average rate.

"In connection with the improvement in the company's business, it is interesting to note that the gas industry nationally reports substantial increases both in number of customers and volume of gas sold. This may be attributed partly to improved economic conditions and partly to more vigorous and better coordinated promotional activities. Among these latter is the national advertising campaign being conducted under the auspices of the American Gas Association. You doubtless have seen some of these advertisements in full color in publications of wide circulation such as *The Saturday Evening Post, McCall's* and *Good Housekeeping*. This very helpful advertising program grew out of an idea first discussed at a meeting in Portland more than a year ago, and your company was among the leaders in bringing about the cooperative effort to gain more widespread recognition of the superior features of gas service.

"Your company is also participating in the nation-wide "Mystery Chef" radio broadcast, released in Portland over KGW from 10 to 10:15 every Tuesday and Saturday morning. Response to this unusually interesting series of popular talks on cooking with gas has exceeded all expectations. Stockholders living in the territory served will do the company a service by calling this excellent radio feature to the attention of their friends and acquaintances. It will also be helpful if you will make note of the advertisements published both by the company and by the American Gas Association, and will speak a good word for gas service at every opportunity."

Nils Sellman Elected A. G. A. Director

N. T. Sellman

NILS T. SELLMAN, assistant vice-president, Consolidated Edison Company of New York, has been elected a member of the Executive Board of the American Gas Association. Mr. Sellman fills a vacancy existing on the Board.

Mr. Sellman has had an extremely active career in the gas industry. A graduate of Stevens Institute of Technology, in 1913, with a degree in Mechnical Engineering, he entered the gas business with the Consolidated Gas Company of New York that year in the utilization department as test engineer of gas appliances. After war service, he rejoined the company continuing his work in the utilization department.

In October, 1921, he became service engineer for the American Gas Association, later becoming assistant secretary-manager. He devoted considerable time to the formation of the A. G. A. Testing Laboratory in Cleveland.

He reentered the employ of the Consolidated Gas Company of New York, as engineer of utilization in 1925. He was appointed assistant secretary in 1928 and later assistant vice-president.

Mr. Sellman was the first winner of the Charles A. Munroe Award presented annually by the American Gas Association to the individual judged to have contributed most to the development of the gas industry during the year. This award was made in 1929 for his pioneering work in connection with the development of the gas refrigerator.

He is now president of Regional Advertisers, Inc., sponsors of the Mystery Chef radio program.

He has been a consistent and prodigious worker on American Gas Association activities, having served on many important committees and presented numerous papers at Association meetings.

City Law Specifies A. G. A. Approval

THE gas by-laws of the City of Calgary, Alberta, stipulate: "No gas burning appliance shall be installed that is not either,

"(A) Stamped with the approval of the Canadian Gas Association Laboratory Approval Division; or

"(B) Stamped with the approval of the American Gas Association Laboratory Approval Division; or

"(C) Approved by a special certificate in writing issued by the City of Calgary Gas Inspector."

Your Association—

What It Is *and* What It Offers

It is surprising how little we members of the American Gas Association know about the work that the A. G. A. staff is performing until we are brought in close proximity to it. Take my case, for example. I have always been active in Association affairs and thought I had a well-rounded viewpoint of its activities. Since I became President, however, I am forced to admit that my previous viewpoint has had to undergo a complete change.

No one without an accurate knowledge of what is actually taking place in the Association's organization can comprehend the large and diversified amount of services that are on tap. Most of us have at best sketchy impressions of the functioning of our Association, and you have to see it from the inside to realize what tremendous amount of good is being done and how few in the aggregate take advantage of it.

This situation should be corrected. I therefore suggested that a series of articles interpreting the work of the Association to all of its members would be in order. The first article in this series accompanies this introduction. May I ask that all members of the Association read this series with the thought in mind that in familiarizing themselves with the various services rendered they will be better equipped to secure a return on their membership dues and further increase their value to the industry.

—Herman Russell

WHAT the American Gas Association means to each individual gas man is a matter for conjecture. It is safe to assume, however, that it represents many different things to different persons. Its activities are so varied that only those in frequent contact with them are able to visualize even in a small way what it offers and what it accomplishes. For this reason, it has been decided to present in a series of brief articles the salient features of the Association's work to the end that its services and activities may become better understood and more widely used. These activities reflect the interest of its members and to the extent that such interest can be heightened and broadened its activities will increasingly serve the needs of the industry.

First of all, the Association is not an isolated endeavor but has the united support of the industry. Its membership comprises operating gas companies distributing more than ninety per cent of the gas consumption of the country. In addition, its membership includes holding companies, appliance and equipment manufacturers, associate companies and a large number of individuals employed in all branches of the gas and allied industries. It was born of a distinct need and has a worthy background. In membership, resources, influence, it is the industry's national organization and its official spokesman.

Broadly speaking, its mission has been described as follows: The Association aspires for the pioneer spirit in research; for engineering efficiency in operations; for standard methods of accounting and an equitable basis of rate making; for highly developed sales sense and programs; for cooperation with manufacturers of appliances and apparatus; for self-regulation in the public interest; for cordial relations between employees and customers—all to the end that the public will receive the best possible gas service at the lowest cost.

As the Association has grown in size, it has slowly and carefully expanded the scope of its activities and its usefulness to the gas industry and the gas consuming public. Applying itself to the outstanding problems of every phase of the gas business, the Association has brought, or is bringing to them, solutions based on common experience and judgment. From its beginning, it has served primarily as a medium of exchange for information and experience, by published reports, by meetings, by correspondence, and by personal contacts. Its activities are closely coordinated and adhere to a carefully planned program set up by the industry's outstanding executives.

A primary function of the Association is to act as a clearing house of vital data on the manufactured gas and natural gas industries. The Association collects this data, verifies it, analyzes and distributes it, and the information so disseminated becomes common knowledge to the entire membership. What would it mean if each member of the Association had to depend upon his own initiative to have this most necessary information at his disposal? The fact is that the gas industry depends upon the Association for such information and the service of collating and supplying it.

Consider, for a moment, the large amount of literature kept on file and in stock at headquarters for the membership. Each year there is published a list of publications sponsored by the Association. Hundreds of individual reports, some of them veritable text books in bulk and content, constitute a growing list of important literature made available to members at prices below actual cost of printing and distribution.

In this list there is literature grouped under such subjects as accident prevention, accounting, advertising and publicity, sales stimulation, employee education, statistical service, public relations, rates, regulation, appliance standards, technical developments, research and many other pertinent subjects. Every major problem facing the industry is presented in some readily available form of Association literature.

The large correspondence handled at Association headquarters is a striking indicator of the diversified work performed. Letters are received from gas men in every department, from gov-

ernmental agencies, from educational institutions, and from the public, asking questions of every conceivable nature. From its large storehouse of data, its files, its extensive library, and the knowledge and experience of its personnel, the Association is admirably equipped to answer these questions. No one individual or company could possibly fill this need. In fact, it is only through the cooperation of hundreds of companies and individuals in the industry and a mutual interchange of information over a period of years that the Association finds it possible to act as a clearing house of information and render an efficient service, by correspondence and otherwise, to its membership.

Appointments to Association committees are of great value to the individual himself and to his company. At committee meetings opportunity is afforded for the discussion of problems on the interchange of ideas among groups of experts. This opportunity is perhaps surpassed only by gatherings such as the annual convention, regional sales conferences, and other sectional meetings. Committee activities, vital to the industry, will be discussed later.

The Association has been organized to render a service of value to all classes of its membership. Those who serve on its Executive Board, the Managing Committees of the sections, and the committees and subcommittees, are picked men, equipped in every way to solve problems of outstanding significance to the industry. The personnel has been organized so that it is ready and able at all times to render prompt and practical service. There is a constant striving to find new ways of better service and lessening costs. No matter what the character of an inquiry may be, machinery is immediately set in motion to give the best answer possible.

This first attempt to bring to our members a more intimate knowledge of the workings and background of their national association has, of necessity, been general in character. In subsequent articles a more detailed picture of the various departments and sections will be attempted. We hope the reader will be interested and will supplement our descriptions with specific questions on activities that may not be clear.

Gas Service in Washington

AN article in the *Esso Oil-Ways* for February entitled "Piping Hot Service in Washington" brings out some interesting facts about gas service in the Capital City.

The average monthly production of gas in the city of Washington, D. C., the article states, could pack 119 zeppelins of the Hindenburg's 7,063,000 cubic foot capacity and still reserve enough to burst every toy balloon east of the Rocky Mountains. The heat value of just one-half hour's production would be ample to keep one small home comfortably heated for many months.

Biggest gas consumer in the city is, of course, the Federal Government, burning 16,000,000 cubic feet of gas a month for heating, laboratory work, water heating, industrial processes, cooking and other purposes in its Washington buildings.

Illuminating gas made its bow in the Senate chamber at Washington one blustery March day in 1847. Dusky attendants walked through the darkening chamber, touched flaming wax tapers to jets, and routed the shadows with brilliant gas-fed illumination—the first major use of gas light in the Capital City.

Once Congress saw the light, its members immediately voted an extension of the gas outlets to other parts of Capitol Hill. An appropriation of $17,500 was granted to light the Capitol grounds and in June, 1847, a certain Mr. Crutchett piled into the job of installing a generating plant in the White House and piping gas to all rooms and corridors. So successful was the lighting of the Capitol and a few other Washington buildings that a plant was built which manufactured the gas from rosin and supplied it to additional buildings.

It is also brought out in the article that wooden mains brought the gas to consumers until the administration of James Buchanan, which began in 1857, when cast iron pipe was imported from England.

It is further stated that in Washington, the company now operates an additional complete station on the opposite side of the city from the original works, and at present has an average monthly output of 844,237,000 cubic feet; on one January day alone in 1936 it supplied to the city a total of 53,000,000 cubic feet. Its storage capacity has swelled from 300,000 cubic feet in 1847 to 25,000,000 cubic feet today. The payroll of the Washington Gas Light Company has rocketed from a handful of men in 1848 to 1,500 active employees today.

Helen Claire, leading lady of Echoes of New York Town, radio program sponsored by the Consolidated Edison Co. of New York, assures President Frank W. Smith of her typing ability during a recent tour of the gas and electric system. Jack Arthur, master of radio ceremonies, and several young ladies in the stenographic bureau are amused at the incident

Survey Shows Gain in Gas-Fired Central House Heating Installations

RESULTS of the ninth annual survey of gas-fired central house heating installations in the United States and Canada, conducted by the Association's statistical department, show a substantial gain in number of gas installations between July 1, 1935 and July 1, 1936. The survey, covering 214 companies, is confined primarily to central heating installations, although many homes are entirely heated by gas-fired radiators, circulating type heaters, floor furnaces, etc.

Installations in manufactured and mixed gas territory showed a pronounced gain for the year amounting to 18.8%, while natural gas installations registered an increase of 13.2%. The total number of installations served by the 214 reporting manufactured and natural gas companies was 192,465 on July 1, 1936, an increase of 25,171 or 15%, as compared with July 1, 1935.

Manufactured and Mixed Gas

Complete reports from 143 manufactured and mixed gas companies serving 8,098,818 customers, or approximately 81% of the total manufactured gas customers in the country, indicate that these companies had 64,719 central heating installations connected to their lines on July 1, 1936, an increase of 10,254 or 18.8% over July 1, 1935. During the twelve months ending July 1, 1936, these companies sold 24,249,742,000 cubic feet of manufactured and mixed gas for house heating, an increase of 15.1% over the previous twelve months.

The most pronounced increase during the year was registered in conversion burner installations which gained 6,916 or 30.8%. The increase in gas-designed jobs was only 10.4%. On July 1, 1935, gas-designed jobs constituted 58.8% of the total installations reported, but on July 1, 1936 this percentage had fallen to 54.6%.

Twenty-six companies showed losses in the total number of house heating customers served. The industry as a whole, however, registered a pronounced gain due to substantial increases on the part of some companies. The largest increase was reported by the Consumers Power Company, which recorded a gain of 2,095 installations, an increase of 159%. Substantial increases in installations were also reported by the following companies:

Washington Gas Light Company
Consolidated Edison Co. of N. Y., Inc.
Public Service Electric & Gas Company
Brooklyn Union Gas Company
Minneapolis Gas Light Company
St. Louis County Gas Company
Public Service Co. of Northern Illinois
Empire Gas & Electric Company
Philadelphia Electric Company
Seattle Gas Company
Georgetown Gas Light Company
New York Central Electric & Gas Corp.
Syracuse Lighting Company, Inc.
Rochester Gas & Electric Corp.
Jersey Central Power & Light Company
Des Moines Gas Company

For the 143 manufactured and mixed gas companies as a group, house heating customers were 0.8% of total gas customers. However, at least 54 companies reported a house heating saturation in excess of 1%. These companies are as follows:

Company	*Saturation %*
Marion Gas Company	36.4
Georgetown Gas Light Co. of Montgomery Co.	11.7
Iowa Central Utilities Company	10.9
Georgetown Gas Light Company	9.8
Empire Gas & Electric Company	6.0
St. Louis County Gas Company	5.9
Washington Gas Light Company	5.8
Public Service Co. of Northern Illinois	5.8
Georgia Power Company	5.5
New York Central Electric & Gas Corp.	4.5
Central Illinois Public Service Co.	4.1
Des Moines Gas Company	4.0
Owego Gas Corporation	4.0
New York Central Electric Corp.	3.8
Washington Gas Light Co. of Montgomery Co.	3.3
Seattle Gas Company	3.3
Syracuse Lighting Company, Inc.	2.8
Consolidated Gas, Electric Light & Power Co. of Baltimore	2.6
Metropolitan Utilities District (Omaha)	2.6
Peoples Gas & Electric Company of Oswego	2.5
Puget Sound Power & Light Company	2.4
Haverhill Gas Light Company	2.3
Concord Gas Company	2.2
Philadelphia Electric Company	2.2
Baldwinsville Light & Heat Co.	2.1
Fulton Fuel & Light Company	2.0
Rosslyn Gas Company	1.9
Consumers Power Company	1.9
Birmingham Gas Company	1.8
The Connecticut Power Company	1.8
Blackstone Valley Gas & Electric Co.	1.8
Citizens Utilities Company	1.7
Dedham & Hyde Park Gas Company	1.7
Lakeshore Gas Company	1.7
North Shore Gas Company	1.6
Jersey Central Power & Light Co.	1.6
Gas Utilities Company (Robinson)	1.5
Fall River Gas Works Company	1.5
New Bedford Gas & Edison Light Co.	1.5
Central Hudson Gas & Electric Corp.	1.5
Portland Gas Light Company	1.4
The Peoples Gas Light & Coke Co.	1.4
Rochester Gas & Electric Corporation	1.4
Minneapolis Gas Light Company	1.3
Boston Consolidated Gas Company	1.3
Worcester Gas Light Company	1.3
New Haven Gas Light Company	1.1
Florida Public Service Company	1.1
Central Illinois Electric & Gas Co.	1.1
Iowa City Light & Power Company	1.1
New York Power & Light Corp.	1.0
Rockland Light & Power Company	1.0
Wisconsin Southern Gas Company	1.0
Battle Creek Gas Company	1.0

Natural Gas

Complete reports from 71 natural gas companies serving 1,642,058 customers or approximately 27% of the total natural gas customers of the country showed that these companies had 127,746 central heating installations connected to their lines on July 1, 1936, an increase of 14,917 or 13.2% as compared with the preceding year. During the year ending July 1, 1936, these companies sold 15,561,177,000 cubic feet of gas for house heating, an increase of 21.3% over the previous twelve months.

Very few reports were received from some of the important states where natural gas has been available for many

years and in which thousands of homes are heated by gas.

A few natural gas companies reported slight decreases in installations served, but most of the companies reported satisfactory increases. The companies showing a drop in installations were generally those with a very slight degree of saturation.

Large increases in house heating installations were reported by the following natural gas companies:

Pacific Gas and Electric Company
The Gas Service Company (Kansas)
The Gas Service Company (Missouri)
Kansas City Gas Company
Public Service Company of Colorado
Atlanta Gas Light Company
Iowa Nebraska Light & Power Company
Oklahoma Natural Gas Company
Cedar Rapids Gas Company
Central Illinois Light Company
Equitable Gas Company
Peoples Light Company

The average saturation of all reporting natural gas companies was 7.78% on July 1, 1936, as compared with 7.12% on July 1, 1935. These figures would undoubtedly be considerably higher if reports had been received from several of the larger companies which have been distributing natural gas for a number of years.

Trends in Equipment Installed

The manufactured and natural gas companies reported increases in all types of equipment—gas-designed and conversion jobs, boilers and furnaces. However, conversion burner installations showed a much greater actual increase and a larger percentage increase than did straight gas-designed jobs.

In manufactured gas territory gas-designed installations continued to predominate, being 54.6% of the total installations on July 1, 1936. In natural gas territory, gas-designed installations were 55.2% of the total on July 1, 1936.

Building Heating

Complete reports from 75 manufactured gas companies indicate 2,641 building heating installations connected to their lines as of July 1, 1936, an increase of 799 or 43.4% over the previous year. Gas sold to these installations during the twelve months ending July 1, 1936, amounted to 1,212,646,000 cubic feet, an increase of 23.4% from the preceding twelve months. Many manufactured gas companies having only a few building heating installations included such jobs under house heating in their reports.

Complete reports from 64 natural gas companies indicate they were serving 11,079 building heating installations on July 1, 1936, an increase of 1,277 or 13.0% over July 1, 1935. During the year ending July 1, 1936, 17,583,036,000 cubic feet were sold for building heating, an increase of 14.8% over the previous year. Pacific Gas & Electric Co. reported an increase of 13.2% in building heating installations, the number served increasing from 3,325 on July 1, 1935 to 3,763 on July 1, 1936.

The complete results of the survey are contained in Statistical Bulletin No. 23 which may be obtained from Association headquarters.

Higgins Resigns from A. G. A To Take New Post

A. E. Higgins

THE American Gas Association has accepted the resignation of Captain A. E. Higgins as secretary of the Natural Gas Department, effective March 15. He resigns to become vice-president of the Pittsburgh Equitable Meter Company.

Captain Higgins joined the American Gas Association in 1927 as field representative. He took charge of the Natural Gas Department in the fall of 1931.

Prior to entering association work, Captain Higgins had an active career in the army. After completing his schooling in 1915, he served with the United States Army in Mexico, with the Villa Expedition. He went overseas early in 1917, returning to this country in August, 1919, when he was appointed instructor in the Field Artillery School of Fire, Department of Material Motors and Equipment, Fort Sill, Oklahoma. He graduated from the Field Artillery School of Fire in the class of 1924.

He returned to West Point Military Academy in August, 1924, to serve as instructor in the Department of Motors and Material. He resigned from the regular army on January 1, 1927. He qualified as Army Air Pilot in 1918 and requalified as Civilian Commercial Air Plane Pilot in 1928. He now holds both licenses and has 3800 hours solo flying to his credit.

In accepting the resignation, of Captain Higgins, Alexander Forward, managing director of the Association, wrote him in part:

"It is difficult to adequately express my regret at the necessity of accepting, effective March 15, your resignation as Secretary of our Natural Gas Department, the position you have occupied entirely to our satisfaction since October, 1931.

"In this period you have secured and retained the friendship, confidence and esteem of our members of the natural gas industry in all ranks. You have successfully planned and carried out the conventions, committee and other meetings and have been well supported in interest, attendance and participation by the leaders of the industry. You have shown your adaptability by securing from authoritative sources information desired by our members and have collected and disseminated the important news of the industry.

"We would not, even if we could, stand in your way of larger opportunities, and I speak for all in assuring you of our desire for your success and happiness.

"It is gratifying that we may count not only on your continued interest and participation in our activities, but also on your active work for the present, including the Kansas City Convention."

Flood News Item

AS the flood waters receded in Louisville, one of the city's largest brokerage houses, a member of the New York Stock Exchange sent to its customers a brief description of conditions instead of its usual market letter: "We are open for business! We have our private telegraph wire and two telephone lines. Six gas heaters and three oil stoves furnish heat, and oil lamps give us some light. With power off, tickers and bookkeeping machinery are out. It is the first time in our history (the firm was founded in 1872) that month-end statements failed to come out on time. The sun is shining, the water is falling and we are not down-hearted."—*New York Times*, Feb. 7.

Evaluating Model Gas Kitchens

Harry Swenson

By HARRY SWENSON
Chairman, Home Modernization Committee

MOST prospective home builders and home owners with minds set on kitchen improvements, do a little planning themselves before revealing their ambitions to the architect or contractor and most of them find themselves confronted with perplexities. Stimulated but bewildered by a vast amount of advertising and articles on modern kitchens and confused by their inability to choose the right material and equipment, they eagerly look for a place to sift their ideas and get authentic information on all angles of modern kitchen design. To them the model kitchen is a welcome institution. It is logical that the gas industry should offer the prospective buyer the needed help and so serve his own interests as well as those of the prospect.

Promotional Features

The last year has seen kitchen planning develop into an important promotional activity with pronounced sales-value, its existence made legitimate by real need. But this activity needs more emphasis and wider spread in order to meet the fast growing competition in the battle for the modern kitchen.

No phase of kitchen planning is more important than the front presented to the public. This front is the model kitchen. Where model gas kitchens are shown they compare favorably, and in some instances, surpass those designed by other interests. But on the whole there are all too few GAS kitchens exhibited.

Every gas company now showing a model kitchen will speak enthusiastically of its value as a sales-agency and advertising feature. In the consumer's mind the gas industry already has an enviable foothold as a reliable source for home information; to carry it further through kitchen planning seems the obvious thing to do. That this is being done in many localities is shown by the accompanying photographs of model kitchens.

Certain practices have been found recommendable and should be considered when a model kitchen is designed. It is undoubtedly a mistake to design it too far ahead of the times. It should be designed for today's mode of living with an acknowledged recognition of tomorrow's tendencies and it should be designed not too far above the average income bracket. The temptation to make it a theatrical job may be strong but must be put aside. It is true that a show-kitchen must have show value but it must be kept within reasonable bonds. A kitchen that is not believable serves no purpose at all.

The model kitchen should be what the term implies, that is, it should be designed to conform in general plan to established good practise for time and energy saving. Arrangement and detail should be correct. If it is to serve as a pattern of what the industry recommends to the modern woman it must be above criticism. It is not recommendable to design a model kitchen to serve merely as an environmental background for the gas appliances. This may seem the loyal thing to do since the appliances are our primary interest but the customer thinks of the kitchen in its entirety with every unit related by function and design. The presentation of the gas kitchen should show conformity to this thinking in order to gain approval. The impression that the gas appliances unify the kitchen and fit harmoniously with other up-to-date equipment will, more than anything else, proclaim them modern.

There is a noticeable tendency in most model kitchens to a crisp, almost antiseptic perfection which is intended to denote functional efficiency but which succeeds only in giving the impression of a clinic or laboratory—avoid this. The coldness of a room which has no actual human activity must be relieved by proper choice of decoration and well chosen accessories. Make the model kitchen friendly, cheerful and believable. Design it for happy living rather than trite function or mere merchandise display. The era when the kitchen is only a chemical laboratory is not yet at hand, the kitchen is still a place for living and must be designed to fit this purpose.

I do not believe the modern woman is so anxious to get out of the kitchen—rather she is anxious to get out of doing the boring chores and tiring tasks which kill her time and numb her interest. The modern gas kitchen, well designed and equipped, is a pleasant place to live in.

Decoration and Detail

When the correct arrangement of the major centers is made the decoration and the details must come in for a good share of consideration. Decoration gives character to the job and the details are the fillip that draws the eye. Under the heading of decoration and detail come such important items as lighting, flooring, accessories, utensils and what the decorator calls "touches." With a wealth of material available on modern kitchens and with every home magazine devoting pages to these things there should be no difficulty in deciding what is effective and in good taste.

The first thought presenting itself in connection with the idea of building a model kitchen is that of cost. Whether this is defrayed through co-operation with local merchants and manufacturers or borne entirely by the gas company, one should consider the long term advertising value, the actual selling value, and the fact that the model kitchen contributes a desirable focal point in an otherwise interest-poor display room. It is certainly no mistake to build a model kitchen in cooperation with dealers and manufacturers alive to the value of kitchen promotion.

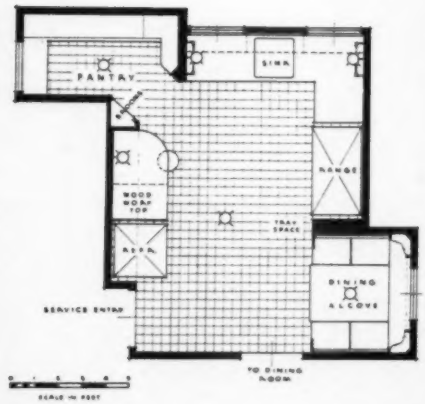
One need not dilate on the advantages of taking a prospect into an attrac-

(Continued on page 116)

There is much interest in this type of compact apartment kitchen shown by The Brooklyn Union Gas Company

Interesting details and perfect appointments are embodied in this modern kitchen shown by The Brooklyn Union Gas Company

This much-frequented kitchen at The Peoples Gas Light and Coke Company, Chicago, does not look like a model kitchen but has all the charm of a kitchen lived in by a happy family. It is cheerful in color, correct in arrangement and full of interesting details. At the left is shown the floor plan

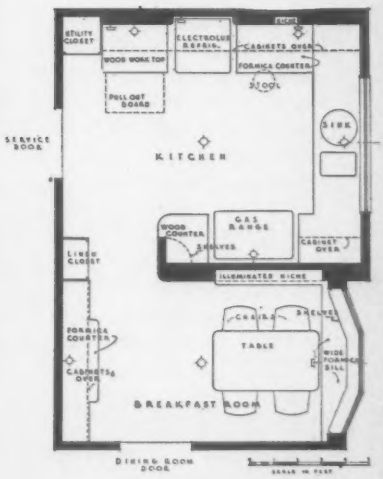


Kitchen shown in display window of The

Designed for a modest home by The Peoples Gas Light and Coke Company, this kitchen has a great deal of simple charm

Not only the correct arrangement should worked out but care should be taken that tails and color scheme are interesting, as this kitchen shown by The Peoples Gas L and Coke Company

This kitchen in the office of The Peoples Gas Light and Coke Company has been seen by more than 150,000 visitors since its opening in August, 1936. Visitors inspect it thoroughly and see the gas appliances demonstrated by a friendly hostess. Architects, builders and home owners come to inspect the details and it has been a meeting ground for friends who say: "Meet me at the Gas Company kitchen." The floor plan is shown at the right



In cost and appointments this kitchen fits well into the average home. It was designed by The Peoples Gas Light and Coke Company

The House Practical

The House Practical at Christmas time

THE story of home comfort through the use of gas and electricity has been dramatized by Public Service Electric and Gas Company of New Jersey in their presentation of the House Practical, a complete suburban home.

The two-story Georgian house in its realistic winter setting is located at 70 Park Place, Newark, adjoining the Public Service Terminal Building. It is beautifully decorated and furnished, creating an atmosphere of gracious living as a background for the display of household equipment.

Visitors (there have been over 63,000 since the first of October) are taken through the House Practical in groups of ten by hostesses who explain every detail of the exhibit and demonstrate appliances in the kitchen and laundry. Each hostess tells a complete story of winter gas-fired air conditioning, kitchen and laundry planning, and proper lighting. Many pertinent questions about gas equipment—its practicability, cost, use, and care—are asked by visitors.

Gas equipment is featured throughout the house. In the living room a gas heater of imitation coal burns brightly and looks like a real coal fire. In the pine-panelled recreation room gas logs lend a note of warmth and color. A modern gas range with an automatic time and temperature control and cooker well is the center of attraction in the kitchen. With it is shown the gas toaster and the gas coffee-maker.

The furnace room appeals to men more than any other room in the house. The cleanliness and order, the efficiency and economy of the gas winter air conditioning unit, the gas garbage incinerator and the gas automatic water heater received favorable comment. Men listen carefully to an explanation of how the air is filtered, humidified and heated by gas.

The laundry has a neat box—a gas clothes dryer—which dries the wash on rainy or sooty days. It both disinfects and dries clothes in an hour.

On the second floor of the exhibit additional displays of heating and air conditioning equipment and several lighted miniature stores have been placed. There are also three kitchens arranged by the Home Economics Department which contrast an old-fashioned kitchen with a modern gas kitchen.

An auditorium adjoins the exhibit where lectures and moving pictures concerning the history of gas and the use of gas for cooking and heating are given to club and school groups who visit the house. Several of these are

(Continued on page 116)

The bright and shining kitchen of the House Practical features a modern gas range, gas toaster and gas coffee maker. At the right is the pine-panelled recreation room where gas logs in the fireplace create a cheerful atmosphere

The Growing Field for Unit Heaters

By R. L. TOWNE

Surface Combustion Corp., Toledo, Ohio

IN no other field of endeavor has there been as unusual a sales opportunity presented to us as in the gas-fired unit heater field. I don't believe, and I think there are statistics to bear me out in this, that there is a branch of the industry where the sales of a specialty have progressed so rapidly and on such a solid foundation as they have in the case of unit heaters.

In reviewing the unit heater market, let us take for a moment some comparisons made between gas-fired unit heaters and all other types of unit heaters for the past year. Government statistics and other available figures as recent as the month of October show that for that month gas-fired unit heater production equalled almost the entire balance of 1936. While steam unit heaters also enjoyed an excellent year the sales curve did not sky-rocket in proportion anywhere near the amount to all unit heaters sold as it did in the case of the gas-fired unit heaters. The increase for the gas-fired unit heater is approximately 156%, while for other types of unit heaters, it amounts to only 78 to about 82%. These figures, incidentally, while reasonably accurate, cannot be taken as final because the entire year's figures are not yet available.

Non-Seasonal Trend

Another extremely interesting and encouraging indication, which, while as yet is still in its embryonic stage but nevertheless discernible, is the non-seasonal trend of the gas-fired unit heater compared to other types of unit heaters. In the accompanying chart we see the unit heater market as it exists at present. You notice in January we start and reach somewhat of a rising market in March which falls again sharply and gives us what might be termed as a dead market during the latter part of May, June, July and the first part of August. The balance of August through September and on up to our peak in October is our rising market and then again all sales fall off sharply toward the end of the year.

Notice that the drop from the rising market in the case of the other types of unit heaters is much sharper and much more rapid than is the gas-fired job although we do not reach their high peaks at this particular time. Notice that the space at the bottom of the rising curve is much wider in the case of the gas-fired unit than it is with other type units in the first market rise in March and in the regular market rise in September and October. While it is true that both of the curves are very jagged, showing decided seasonal tendencies, yet the overall curve of the gas-fired unit heaters shows less seasonal tendencies or a marked non-seasonal trend over other types of unit heaters. Of course, there is a very definite reason for this which we will take up in a moment or two.

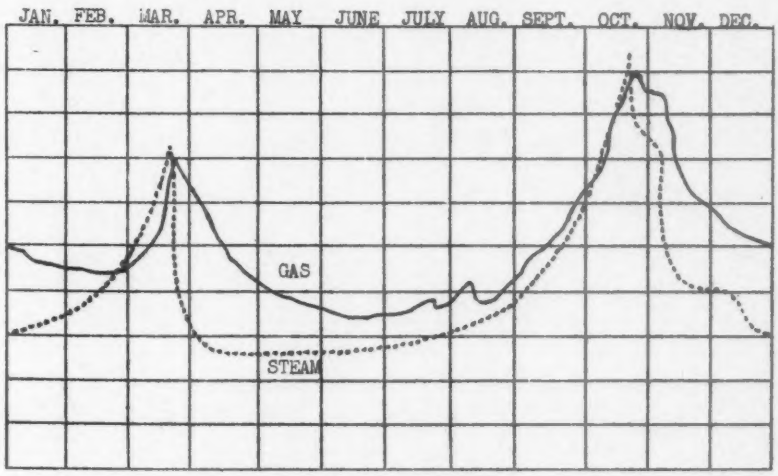


Chart showing unit heater market

We have seen now that the increase in gas-fired unit heater sales is in a much healthier state than is the balance of other unit heaters even though both are enjoying an excellent business at this time. But, there must be a real reason why gas-fired unit heaters are progressing so rapidly. Last year in talking before several groups, we made it a special point that the commercial field was the new horizon for gas-fired unit heater sales. It is in this field that we shall find our real reason for the great jump in unit heater volume and here, too, we will find the answer to many of our unit heater sales problems.

To those of us in the heating industry it doesn't require a great stretch of our imagination to remember when unit heaters were definitely an industrial product. We thought of them in industrial terms and the application was confined to industrial buildings. Just who began to develop the commercial unit heater field first I do not know. I think it probably has been a demand from the buyers rather than any incentive offered by the seller. In that, too, we shall learn a lesson which should be of invaluable aid to us. But, as the market scope increased, selling methods naturally began to refine, for it is also true that only a very short few years ago, the sale of a unit heater was definitely an engineering rather than a sales job.

The gas-fired job specifically has made more progress because the tendency to sell this job on a strict engi-

Address before Eastern Regional Natural Gas Sales Conference, Pittsburgh, Pa., February 4-6, 1937.

neering basis has been overcome to a greater extent in the gas field than it has in any other.

But, let us get back for a moment and see about that real fundamental reason why the sales of gas-fired unit heaters are far ahead of the sales of other types of unit heaters in direct proportion. Let us look, first, and see if there isn't some real reason why the majority of steam unit heater manufacturers are now either marketing or beginning to experiment with designs of a gas-fired job. Understand, they have a very wonderful business already worked up and the only possible reason why they would be interested in enlarging their line so as to include gas-fired units is the clue through which we can find the secret of the salability of the product in which we are interested.

Courtesy Public Service News

Circled in the picture above are two of the six gas-fired unit heaters used to heat the Great Eastern Super Market in Orange, N. J. Each heater has a capacity equal to 690 square feet of steam radiation. The heating system was designed by Public Service Electric and Gas Company

Modernization Market

Some years ago in assisting on an exhaustive survey one of the most startling conclusions that came to light was the fact that our market for heating equipment of all kinds was in a ratio of 6:1 in existing buildings as against new buildings. We all hear a lot of talk and have a lot of enthusiasm about the new home or the new building as a place to sell our equipment, and it was really only a few years ago that the replacement and modernization market came in for its full and actual share of importance. At the time of making this survey, which, incidentally, was originally directed toward the home market, we wondered whether or not we could apply the same principle to the commercial market and subsequent investigation proved that about the same ratio held true as far as our potential was concerned except in localities which were experiencing a large real estate or industrial development boom.

Now then, if you will recall to mind the most of the neighborhood stores, most of the churches, most of the halls, and other commercial and semi-commercial type buildings with which you yourself are familiar, you will remember that they have fairly good heating equipment and in a great majority of cases, this heating equipment is functioning in rather a satisfactory manner. Upon closer examination, however, you will find that although this heating equipment is in fairly good condition changing times and changing and modernizing the buildings have necessitated that additional heating be installed. We, therefore, find that the biggest factor in the contribution of the increasing popularity of the gas-fired unit heater is in supplementary heating. This is true (1) because with gas unit heaters installation is simpler and because the installation of a gas-fired unit heater requires no heating system changes: (2) it is installed where needed most; (3) there is no interruption to business; (4) the units are supplied faster; (5) the units are installed quicker.

Installation Factors

In the smaller store we find a great many simple type heating systems of the old warm air design and they are used because of the extreme difficulty in placing wall-hung radiators in a store so as not to interfere with counter, rack and display space. In instances where a simple type steam or hot water plant is used in the small store, it is usually exceedingly small, and the point that I am trying to get at is this, that there is absolutely no supplementary heating market in this classification for the manufacturer of the steam unit heater.

As we have just seen, however, this is a natural market for the gas-fired unit heater. We all know that when you have an existing steam or hot water heating system and you wish to add more radiation, it very often requires re-engineering of the entire layout. We also know that this is a simple matter when the installation of a gas-fired job is considered. Another thing, looking back to our reasons here, we see that a great contributing factor is that the gas-fired unit heater may be and can be installed where it is most needed and desired. This is very often not the case with the steam unit heater because of the heating system layout, installation is sometimes almost an impossibility and at best an impracticability.

It is easy to understand then that wherever supplementary heating is needed, the gas-fired unit heater best fits that need. It can be installed in a matter of a few hours, in no way interfering with the normal procedure of business. It is usually stocked for a rapid delivery by the gas company, and its installation is so easy and simple that very often the unit can be in and working in a matter of just a few hours after it has been ordered.

And, now let's look to the future. We have a product second to none, a type of equipment that the public needs and wants. We have our industrial market to sustain us while we are developing this great commercial mar-

(Continued on page 111)

Customer Accounting Center Speeds Utility Service

A CUSTOMER'S accounting center, at which is concentrated all the gas and electric commercial relations accounting work of the entire Borough of The Bronx in New York, was recently placed in operation by the Consolidated Edison Company of New York. Now all gas and electric customers in that area call one telephone number no matter what the nature of the request.

This center, with 1,500 employees, functions for 400,000 customers who have 840,000 gas and electric meters. It supplies a centralized telephone service, and by means of units of 50,000 gas and electric meters each, cares for all ledger, billing, and credit and collection operations.

Other units care for all the remaining phases of customer accounting, including meter reading, addressographing, machine billing, collections, payment receipts, statistical analysis and journal, deposit control operations, and personal service, which includes adjustment of high bills and satisfying customer inquiries.

A unit of the company's General Office Service Department supplies mailing, filing, stenographic, and messenger service.

The pending order files at the customer accounting center

The centralized telephone service supplants that formerly supplied by five affiliated companies at four separate points.

A battery of teletype machines at the center, connected with the telephone order table by a fast-moving conveyor belt, makes possible instantaneous transmission of turn-on, turn-off, or repair orders to service men

A section of New York's first telephone order table, manned by forty telephone service clerks

Machine billing section. Nearly fifty machines fill out gas and electric bills at a group rate of 6,000 an hour

One of the accounting units of 50,000 gas and electric meters

Personal and Otherwise

Wins A. G. A. Scholarship

Alvin Johnson

THE American Gas Association scholarship at Purdue University, Lafayette, Indiana, has been awarded to Alvin V. Johnson for 1936-37, according to an announcement by A. A. Potter, dean of engineering.

Mr. Johnson had a superior record as an undergraduate, his grades placing him in the upper quarter of his class. Since 1931 he has been teaching but has now returned to Purdue University for graduate study and expects to receive the master's degree in June, 1937.

He has been assigned the problem of developing gas-fired, long life cyanide bath for heat treating work in industry.

The A. G. A. scholarship at Purdue University is maintained from the income of the Trustees Gas Educational Fund which was turned over to the custody of the Association some years ago with the understanding that it would be used for educational purposes.

Speer Heads Virginia Public Service

ELECTION of Alex Speer to the presidency of the Virginia Public Service Company by the directorate was announced recently. Mr. Speer resigned as president of the Florida Power Corp. to fill his new post. He succeeds J. S. Avery, who resigned to become a vice-president of the Utility Management Corp. of New York.

Dr. Schrenk Appointed Chief Chemist

DR. HELMUTH H. SCHRENK has been appointed chief chemist of the Health Division of the U. S. Bureau of Mines, it is announced by Dr. John W. Finch, director of the bureau. Dr. Schrenk will succeed William P. Yant, resigned, and will have his headquarters at the Pittsburgh Experiment Station.

Dr. Schrenk joined the staff of the Health Laboratory Section, Pittsburgh Experiment Station, in 1928. He has held successively the positions of associate toxicologist; chemist-in-charge of the toxicological and biochemical laboratory; and chemist, gas section.

Since September, 1936, Dr. Schrenk has been acting chief chemist of the Health Division and has had charge of additional research as follows: Investigation of air dustiness as affecting workers; development of methods for collecting, quantitating, and analyzing dusts; studies of methods for preventing and controlling air dustiness. He has been directing work on approval testing of respiratory protective devices such as gas masks, mechanical filter type respirators, and supplied-air respirators.

1937 Munroe Award Committee Appointed

F. C. Weber

PRESIDENT RUSSELL has announced the appointment of the Charles A. Munroe Award Committee for 1937. F. C. Weber, vice-president of The Brooklyn Union Gas Company, will act as chairman. Charles W. Bradley, vice-president of the Public Service Company of Northern Illinois, Chicago, and F. F. Schauer, vice-president of the Equitable Gas Company, Pittsburgh, complete the committee. These men need no introduction to the gas industry. This committee will give careful consideration to all applications received for this coveted award in reaching its decision as to the worthy recipient.

The Charles A. Munroe Award is presented annually to the individual who is judged to have made the greatest contribution to the advancement of the gas industry. Such contribution may concern any phase of the gas business, attested by the fact it has, since its inception in 1929, been awarded for development of the gas refrigerator, introduction and application of machine bookkeeping, pioneering and constructive leadership in rate making, development of ideas and methods of dealer cooperation, successful application of economic reasoning to sales expansion, development of a relatively inexpensive method of raising the level of human service by utilities, and outstanding engineering accomplishment. The award consists of a substantial sum of money and an engrossed certificate.

In judging contributions Mr. Weber's committee will consider the following factors—originality, completeness, scope of usefulness and value.

All applications for the 1937 Award must be filed with Association headquarters on or before August 1, 1937. Presentation of the award will be made next October at the annual convention of the American Gas Association.

Gas Scores Sweep in Cake Contest

IN a striking and convincing advertisement, in local newspapers, the Atlanta Gas Light Company, Atlanta, Georgia, points out that in a recent cake-baking contest, 21 out of 500 cakes won prizes and every winner was baked with gas.

The advertisement carried the following interesting copy:

"In the recent cake-baking contest sponsored by *The Journal* there were five hundred entries from the territory served by the Atlanta Gas Light Company. Twenty-one of them won prizes. And, although the cakes entered were baked on every sort of range, in every sort of oven, every one of the cakes which won a prize was baked on a gas range.

"Before the contest we ventured to predict that at least nine out of ten of the winning cakes would be baked with gas. We were playing safe. We knew what every good cook knows; that nothing equals gas for baking, or any other good cooking.

"It is interesting, and gratifying to us, that some of the prizes were won with gas ranges up to twenty years old. Of course, more modern gas ranges are much better, and, in fact, won many more prizes.

"But it again bears out the fact that in actual performance a twenty-year-old gas range will excel today's 'most modern' range of any other kind.

"Throughout the South, and outside our territory, three prize-winning cakes were baked with other fuels; two with oil, and one with wood. To these winners we extend especial congratulation on their superlative skill.

"What cooks they *would* be with a modern gas range!"

W. W. Winter is president of the Atlanta company.

Air Reduction Changes

AIR Reduction Sales Company has announced the following changes in personnel: H. F. Henriques and J. J. Lincoln, Jr. have been appointed assistant general sales managers with headquarters in Cleveland and Pittsburgh, respectively.

J. M. Driscoll has been made acting manager at Cleveland. S. D. Edsall has been appointed acting district manager of the Pittsburgh district. A. W. Brown has been appointed assistant railroad sales manager with headquarters in New York.

J. F. Pryor, formerly assistant to the general sales manager, has been appointed vice-president of the Magnolia Airco Gas Products Company. This company is a Texas corporation handling all of Air Reduction's activities within that state. Mr. Pryor will make his headquarters in Houston.

Fox Furnace Company Executive Dies

William H. Hill

WILLIAM HOGARTH HILL, chairman of the board of The Fox Furnace Company and vice-president and director of the American Radiator Company, died in New York City, Friday, January 29.

Mr. Hill was 69 years old. He has been prominent in the heating industry for the last 46 years, since he joined the Michigan Radiator & Iron Company of Detroit, in 1891, one of the three companies that merged to form the American Radiator Company.

After the forming of the American Radiator Company he was made manager of the New York branch. He moved to the executive offices in Chicago in 1902. In 1904 he became vice-president and general manager of manufacturing and in 1915 was made vice-president and treasurer of the company.

In 1921, Mr. Hill was made president of The Fox Furnace Company of Elyria, Ohio, a division of American Radiator and Standard Sanitary Corporation, and in 1930 was elected chairman of the board.

W. P. Strandborg Dies

WILLIAM P. STRANDBORG, one of the founders of the Public Utilities Advertising Association and its first president, died recently in Portland, Oregon. For many years Mr. Strandborg was manager of the public relations department of the Portland Electric Power Company.

J. J. Humphreys Dies in Montreal

JAMES JOHN HUMPHREYS, for eighteen years chief engineer of the gas department of the Montreal Light, Heat and Power Consolidated, died January 24. He was sixty-six years old.

After his early education, Mr. Humphreys became interested in the engineering profession and entered the business at Bayonne, N. J., his birthplace, in 1886, where he took a great interest in the manufacturing and distribution of gas. He became cadet engineer, then assistant superintendent of the United Gas Improvement Company at Bayonne, Kansas City and Waterbury.

While still a young man, Mr. Humphreys was appointed secretary-treasurer and general manager of the Ottawa Gas Company at Ottawa, Ont., and later was appointed superintendent of the gas companies at Westchester, Pa., Worcester, Mass., Coney Island, N. Y., Louisville, Ky., and Augusta, Ga.

In 1919, he was appointed chief engineer of the gas department of the Montreal Light, Heat and Power Cons., which position he held until his death. Under his management the gas department of the company was greatly expanded. He was an authority on gas manufacturing and distribution.

He was an active participant in the affairs of the American Gas Association, being a director for several years, and was widely respected in the gas industry. He was a former manager in New York of the Illuminating Engineers Association, president of the Canadian Gas Association, member of the New England Gas Association, and member of the Engineering Institute of Canada. He was also an officer of the Red Cross and director of the Tuberculosis Hospital in Brooklyn, N. Y.

Douglas Buckler Is Dead

DOUGLAS A. BUCKLER, advertising director of Southern California Gas Company, passed away at his home at 232 North Almont Drive, Beverly Hills, Calif., on February 16.

Highly esteemed in the gas industry and the advertising profession, Mr. Buckler had been associated with the gas company for the last six years. Prior to that time he was advertising manager of the Bank of America in Los Angeles.

Mr. Buckler was born in Provo, Utah, and is survived by his widow, Mrs. LaVerne Buckler, and by his father, A. E. Buckler, of Salt Lake City.

He was a member of the Advertising Club of Los Angeles and a director of that organization in 1934. He was also active in committee work for the Pacific Coast Gas Association.

Convention Calendar

MARCH

1-5 **American Society for Testing Materials**
Palmer House, Chicago, Ill.

2-3 **A. G. A. National Commercial and Hotel and Restaurant Sales Conference**
Benjamin Franklin Hotel, Philadelphia, Pa.

10-12 **Southern Gas Association—Southwest Regional Gas Sales Conference**
Peabody Hotel, Memphis, Tenn.

15-16 **Wisconsin Utilities Association—Gas Section Commercial and Technical Divisions**
Schroeder Hotel, Milwaukee, Wis.

18-19 **Pacific Coast Gas Association—Technical Section**
Los Angeles, Calif.

22-23 **Oklahoma Utilities Association**
Mayo Hotel, Tulsa, Okla.

23 **New Jersey Gas Association**
Berkley Carteret Hotel, Asbury Park, N. J.

APRIL

1-2 **Pacific Coast Gas Association—Sales & Advertising Section**
Los Angeles, Calif.

12-14 **A. G. A. Distribution Conference**
Wardman-Park Hotel, Washington, D. C.

12-14 **Mid-West Gas Association**
Waterloo, Iowa

21-23 **Missouri Association of Public Utilities**
Elms Hotel, Excelsior Springs, Mo.

26-29 **U. S. Chamber of Commerce**
Washington, D. C.

MAY

4-5-6 **Pennsylvania Gas Association**
Lodge of the Sky Top Club, Sky Top, Pa.

10-15 **Natural Gas Department, A. G. A.**
Kansas City, Mo.

24-26 **A. G. A. Production and Chemical Conference**
Hotel New Yorker, New York, N. Y.

28-29 **A. G. A. Executive Conference**
Palmer House, Chicago, Ill.

JUNE

1-4 **Edison Electric Institute**
Chicago, Ill.

7-9 **National Office Management Association**
Chicago, Ill.

8-9 **A. G. A. National Conference on Industrial Gas Sales**
Palmer House, Chicago, Ill.

10-11 **Canadian Gas Association**
Chateau Laurier Hotel, Ottawa, Canada

11-16 **International Gas Union**
Paris, France

14-20 **Second World Petroleum Congress**
Paris, France

24-26 **American Society of Heating and Ventilating Engineers**
New Ocean House, Swampscott, Mass.

JULY

1-3 **Michigan Gas Association**
Grand Hotel, Mackinac Island, Mich.

SEPTEMBER

Wk. 27 **American Gas Association**
Cleveland, Ohio

OCTOBER

18-21 **American Society for Metals**
Atlantic City, N. J.

New officers and directors of the New England Gas Association. In the picture are, left to right: Front row—N. B. Bertolette, W. C. Bell, R. L. Fletcher, F. L. Ball, G. S. Hawley, R. J. Rutherford, F. D. Cadwallader. Middle row—Clark Belden, R. N. Hill, J. A. Cook, W. F. Norton, F. M. Goodwin, E. M. Farnsworth, Jr., C. H. Cummings. Back row—A. B. Cole, H. R. Sterrett, J. A. Weiser, G. W. Stiles, G. P. Velte, R. E. Wright, Cyrus Barnes, Otto Price

New England Gas Association

R. L. Fletcher

WITH a registration of 402 as compared with 371 last year, and a total attendance of more than 500, the annual meeting of the New England Gas Association, held February 11 and 12 in Boston, Mass., was considered one of the most successful ever held by that association. This year's registration and attendance were the highest in seven years, according to Clark Belden, secretary of the association. President F. L. Ball presided throughout the meeting which was addressed by many of the gas industry's outstanding executives as well as local sales and operating men.

Officers elected for the 1937-1938 fiscal year are: president—F. L. Fletcher, Providence, R. I.; first vice-president—G. S. Hawley, Bridgeport, Conn.; second vice-president—R. J. Rutherford, Worcester, Mass.; treasurer—F. D. Cadwallader, Boston, Mass.

Newly elected directors are: W. C. Bell, Boston; N. B. Bertolette, Hartford; J. A. Cook, Lynn; C. H. Cummings, Boston; E. M. Farnsworth, Jr., Boston; F. M. Goodwin, Boston; I. T. Haddock, Cambridge; R. N. Hill, Burlington; W. F. Norton, Nashua; H. R. Sterrett, New Haven; G. W. Stiles, Portland; G. P. Velte, Boston; J. A. Weiser, Newport; F. L. Ball, Boston.

The following men who were selected as division chairmen automatically become directors: operating—D. S. Reynolds, Boston; sales—Cyrus Barnes, Boston; industrial—R. E. Wright, Cambridge; accounting—Otto Price, Boston; manufacturers—A. B. Cole, Boston.

Michigan Gas Association

ACCORDING to announcement of A. G. Schroeder, secretary-treasurer of the Michigan Gas Association, the 1937 convention of the Association will be held July 1-3 at the Grand Hotel, Mackinac Island, Michigan. Plans are already under way to prepare a program made up of timely and informative subjects. Further announcements concerning the details will appear in THE MONTHLY.

McCarter Awards

FIVE men employed by the Central Hudson Gas and Electric Corporation, Poughkeepsie, N. Y., were singularly honored recently by the presentation of McCarter medals and certificates of assistance for their efforts in saving life by the Schafer prone pressure method of resuscitation. McCarter medals and certificates were awarded to Joseph H. Coone and Lawrence A. Wood, while certificates of assistance were presented to Clinton Barrett, Wynne S. Toombs and Oscar E. Hager. Presentation was made January 29 by Ernest R. Acker, president of the company, at a meeting of the advisory board and general officers.

The act for which Wood, Toombs and Hager were honored took place in Newburgh, N. Y. These three alternated in applying the prone pressure method of resuscitation on Otto Van Tienan who had been overcome by gas. Their prompt action saved Van Tienan's life.

Coone and Barrett saved the life of Donato Romano, an employee of the A. C. Smith and Company, plumbing and heating contractors, in Beacon, N. Y. In a letter to Central Hudson following the resuscitation, A. C. Smith and Company highly praised the quick action of Coone and Barrett and concluded: "It gives us a sense of security to know that your organization is so efficient and well trained to handle anything of this nature."

The awards are made possible through the generosity of Thomas L. McCarter, president, Public Service Electric and Gas Co., Newark, N. J. and are awarded by the Accident Prevention Committee of the American Gas Association.

At the January Safety Meeting of the Research and Testing Department of The Peoples Gas Light and Coke Company, Chicago, Ill., a McCarter Medal and certificate were presented to Paul L. Nebel, an employee of the company. Robert B. Harper, vice-president, in charge of the department, made the presentation and congratulated Mr. Nebel on being the first employee in his department to receive this honor. In a brief talk, Mr. Harper emphasized the importance of the Schafer prone pressure method of resuscitation to all gas company employees.

At the present time the use of gas in the average home is 10 times as large in energy units as in the form of electricity.

—HERMAN RUSSELL

Natural Gas Department

George E. Welker, Chairman A. E. Higgins, Secretary Robert W. Hendee, Vice-Chairman

Plans Made for Record Natural Gas Convention in Kansas City

EARLY hotel reservations, the large demand on the part of manufacturers for exhibition space and the exceptionally high type program that has been arranged indicate that the 1937 Natural Gas Convention will be one of the largest and most successful ever held. The convention is on the natural gas men's calendar for May 10 to 14 and will be held in Kansas City, Mo.

The exhibition of appliances and equipment and all of the convention sessions are to be held in Kansas City's new 6½ million-dollar municipal auditorium.

Two views of Kansas City's new 6½ million dollar auditorium where all natural gas convention sessions will be held. The interior view shows the main floor of the exhibition hall where the manufacturers' exhibition of gas appliances and equipment will take place. There is a total of 120,000 sq.ft. of space available to exhibitors

It was 30 years ago, in 1907, when the first natural gas convention was held, the founders of the old Natural Gas Association of America meeting for the first time in Kansas City that year.

It has been eight years since the Natural Gas Department of the American Gas Association has had an appliance and equipment exhibit in connection with the convention, the last exhibit being held during the Natural Gas Department meeting in Kansas City in May, 1929.

Members of the new gas and appliance equipment manufacturers organization which was formed last year, decided, following a successful exhibit at the Atlantic City A. G. A. Convention in October, to hold an exhibit in connection with the Kansas City natural gas meeting. The Association plans to repeat the exhibit at the Natural Gas Convention every other year.

C. W. Berghorn, executive secretary of the Association of Gas Appliance and Equipment Manufacturers, from interest already shown by manufacturers, believes the entire exhibit space in the exhibition hall of Kansas City's municipal auditorium will be sold far in advance of the opening date of the convention.

Major T. J. Strickler, general manager of the Kansas City Gas Company, is serving as general chairman of the Kansas City convention and working with Mr. Berghorn and Capt. A. E. Higgins, secretary of the Natural Gas Department, to make the convention a success in every way.

An interesting entertainment program has been arranged. On Monday night, May 10, a smoker and athletic show has been planned. The annual banquet will be held in the arena of the auditorium on Wednesday night and plans are being made for at least 2,000 natural gas men and their wives to attend this affair. Special entertainment is being planned for nearly every day of the convention for the visiting ladies. Paul C. Ford of the Kansas City Gas Company is chairman of the Entertainment Committee.

One of the most interesting programs ever held during a natural gas convention was arranged by the program committees at a joint meeting in St. Louis on Thursday, January 21. At this meeting were members of the three program committees—Natural Gas Transmission Committee, Natural Gas Sales and Utilization Committee and the

Meeting of program and publicity committees in St. Louis to perfect plans for the natural gas convention. Pictured above, left to right, are: W. F. Hartwig, Julian F. Foster, G. M. Parker, Floyd C. Brown, J. Frank Robinson, Edgar G. Hill, Robert W. Hendee, A. E. Higgins, W. Jennings Young, C. D. Byrd, F. D. Bradley, Ben F. Pickard, Ray T. Ratliff. Standing—J. H. Dunn, E. L. Rawlins, Eugene D. Milener, J. F. Curry, Charles D. Greason, Robert D. Lewis, Paul C. Ford, J. M. Fraybill

Natural Gas Production Committee. These committees not only arranged the sectional meetings for their own committees, but arranged the general session programs. The complete program, including subjects to be discussed and speakers, will be announced in the April issue of the MONTHLY.

Program plans call for the opening of the exhibit on Sunday afternoon, May 9. At this time early arrivals at the convention will have their first opportunity to view the exhibit and plans have been made to open the exhibit to the Kansas City public on this afternoon. A special invitation will be made by the Kansas City Gas Company and other gas companies in the Kansas City territory to plumbers and appliance dealers to view the exhibit on Sunday afternoon, although arrangements will be made for those who sell appliances and equipment in the territory to view the exhibit any time during the week.

Five general sessions are scheduled on the program. An unusual program that will be of special interest, soon to be announced, is planned for the final general session. No program has been scheduled for Tuesday afternoon. That afternoon has been left open so that all attending the convention may have a free afternoon to visit the appliance exhibit.

The first of the sectional meetings will be held Wednesday afternoon when the Natural Gas Production Committee and the Natural Gas Utilization and Sales Promotion Committee are scheduled to meet. The Sales Promotion Committee will hold its second session on Thursday afternoon and the first session of the Natural Gas Transportation Committee will be held the same afternoon. A meeting of the Industrial Gas Conference Committee is also on the program for Thursday afternoon.

Following is a list of the program committees and publicity committee for the convention which were appointed by George E. Welker, chairman of the Natural Gas Department:

Natural Gas Transmission Committee:

F. F. Doyle, Chairman, Pacific Gas and Electric Company, San Francisco, Calif.

A. L. Forbes, Jr., Vice-chairman, El Paso Natural Gas Company, El Paso, Texas.

Floyd C. Brown, Natural Gas Pipeline Company of America, Chicago, Ill.

J. L. Foster, Lone Star Gas Company, Dallas, Texas.

Edgar C. Hill, Ford, Bacon & Davis, Inc., New York City, N. Y.

Ray T. Ratliff, of the Kansas City Gas Company, chairman of the hotel reservation committee for the Natural Gas Convention to be held in Kansas City, May 10 to 14, has informed the Association that a large number of hotel reservations already have been made.

The Hotel Muehlebach, official headquarters for the convention, already is booked to capacity. Many other leading Kansas City hotels have received a large number of reservations. Natural gas men who expect to attend the convention are urged to make their hotel reservations as soon as possible.

"However," Mr. Ratliff states, "there will be plenty of hotel facilities in Kansas City for all manufacturers and gas men who attend this year's meeting."

Many large Kansas City hotels are located within a few blocks radius of the municipal auditorium.

Among the leading hotels in the down town district, within three blocks of the auditorium, are the Hotel Phillips, Hotel Kansas Citian, Hotel President and the Hotel Baltimore. Other hotels in the near vicinity of the hall are the Robert E. Lee Hotel, Stats Hotel and the Hotel Aladdin.

The large Hotel Bellerive located in the residential district at Armour and Warwick boulevards, also has already accepted a number of reservations.

George M. Parker, Mississippi River Fuel Company, St. Louis, Mo.

Fay C. Walters, Panhandle Eastern Pipeline Company, Kansas City, Mo.

Natural Gas Production Committee:

B. M. Nowery, Chairman, United Gas Public Service Company, Houston, Texas.

W. Jennings Young, Vice-chairman, Oklahoma Natural Gas Company, Tulsa, Okla.

J. H. Dunn, Lone Star Gas Company, Dallas, Texas.

L. A. Farmer, Oklahoma Natural Gas Company, Tulsa, Okla.

H. P. George, Southern California Gas Company, Los Angeles, Calif.

S. W. Meals, Carnegie Natural Gas Company, Pittsburgh, Pa.

J. G. Montgomery, United Natural Gas Company, Oil City, Pa.

J. French Robinson, Peoples Natural Gas Company, Pittsburgh, Pa.

Natural Gas Sales & Utilization Committee:

F. M. Banks, Chairman, Southern California Gas Company, Los Angeles, Calif.

C. E. Bennett, Manufacturers Light and Heat Company, Pittsburgh, Pa.

W. C. Grant, Lone Star Gas Company, Dallas, Texas.

H. P. Sedwick, Public Service Company of Northern Illinois, Chicago, Ill.

J. W. West, Jr., American Gas Association, New York, N. Y.

Ex-Officio Members:

George E. Welker, Chairman, Natural Gas Department, United Natural Gas Company, Oil City, Pa.

Robert W. Hendee, Vice-chairman, Natural Gas Department, Colorado Interstate Gas Company, Colorado Springs, Colo.

A. E. Higgins, Secretary, Natural Gas Department, Dallas, Texas.

Publicity Committee:

Chas. D. Greason, Chairman, The Gas Service Company, Kansas City, Mo.

W. C. Grant, Lone Star Gas Company, Dallas, Texas.
Don Buckler, Southern California Gas Company, Los Angeles, Calif.
Howard Weeks, Consolidated Edison Company, New York City, N. Y.
J. C. Barnes, New Orleans Public Service Company, New Orleans, La.
R. D. Lewis, Laclede Gas Light Company, St. Louis, Mo.
J. F. Curry, Panhandle Eastern Pipeline Company, Kansas City, Mo.
D. C. Schnabel, United Gas Public Service Corporation, Houston, Texas.
F. D. Bradley, Southern Union Gas Corporation, Dallas, Texas.
LeGare, Davis, Atlanta Gas Light Company, Atlanta, Ga.
Frank R. Jamison, Public Service Company of Colorado, Denver, Colo.

Natural Gas Fellowship Awarded to Mitchell

W. C. Mitchell

THE Natural Gas Fellowship, maintained at the University of Oklahoma by the American Gas Association, has been awarded to W. C. Mitchell, who for several years has been employed as a chemist in the laboratories of the Texoma Natural Gas Company at Frich, Texas. Previous to this work, he completed his undergraduate studies and received a Bachelor of Science degree at the University of Dayton, Ohio.

The problem suggested for research by the Association is the study of the thermodynamics of gas regulators. This is a continuation of the problem which was investigated by K. J. Sonney, the Fellow for the past two years. Mr. Mitchell is well prepared to carry on this work. During the past few years under the direction of E. C. Hammerschmidt, a recognized authority on gas hydrates, he constructed and operated apparatus used for investigating the formation of hydrates. At this work he also became familiar with the problems arising in the operation of a large scale dehydration plant.

At the University the temperature changes which take place as gas passes through various kinds of regulator valves and chokes are being investigated in an attempt to arrive at a practical method for calculating the minimum temperature which may be encountered in a regulator. With this knowledge it is believed regulator freezing may be prevented by one of the following methods:

1. Dehydrating the gas until the dew point is below the minimum temperature to be encountered.

2. To heat the inlet gas just hot enough in a thermostatically controlled heater to raise the minimum temperature above freezing.

3. To make the pressure cut in several regulators so that the minimum temperature on each regulator will be above freezing.

4. To use a specially designed regulator in which enough heat may be transferred from the warm low velocity inlet and outlet to the valve seat keeping it above freezing temperature.

Mr. Sonney, with the cooperation of the Phillips Petroleum Co. and the Southwest Gas Company of Oklahoma, has made a number of tests of this kind using gas at from three to five hundred pounds pressure. Although the inlet pressures were high, in only a few cases were the outlet pressures low enough to obtain critical velocities.

Mr. Mitchell, working with practically the same apparatus, is making measurements with critical flow through the chokes and valves. The equipment for this test is connected so that gas may be taken at high pressures from the inlet side of the city gate regulator of the Oklahoma Natural Gas Company of Norman. After passing through the test set up, it is discharged back into the line on the low pressure side of the regulator.

New Method of Determining Compressibility of Gases

A NEW method of determining compressibility of gases has been developed by the U. S. Bureau of Mines, Department of the Interior, in the laboratory at the Amarillo, Texas, Helium Plant, which is operated under the Bureau's Petroleum and Natural Gas Division.

Customary methods of determining pressure-volume-temperature relations for gases require measurements of the volume of a constant mass of gas. Experimentally, it is much easier to measure pressures than it is to measure volumes with requisite precision, especially when the pressures are high and the associated volumes are small. The new method, devised by E. S. Burnett of the Bureau's staff, eliminates the necessity of making any volume measurements and permits calculation of the relations from observations of pressures and temperatures only.

In the seventeenth century the Irish scientist Robert Boyle, son of the Earl of Cork, announced that at constant temperature the volume of a gas varies inversely as the absolute pressure, and in the eighteenth century J. A. C. Charles, a French mathematician and physicist, stated that at constant pressure the volume of a gas varies directly as the absolute temperature. Since their announcement, these two "gas laws," and combinations of them, have served admirably in many engineering and industrial computations dealing with real gases, although these laws apply strictly only to a hypothetical "ideal gas." Amagat studied deviation of real gases from the gas laws as early as 1878, and since then it has been known that no real gas follows these laws exactly.

In earlier years deviations from the gas laws were of scientific rather than practical interest, but as industrial processes have become more complex and gases have been handled at higher pressures and wider ranges of temperatures, it has been necessary for engineers and industrialists to take account of the actual pressure-volume-temperature relations as determined by experiments rather than those indicated by the laws of an ideal gas. In fact in many present-day applications, computations based on the laws of Boyle and Charles would give results widely in error and possibly lead to physical or financial loss.

As the method developed by the Bureau facilitates experimental determination of the actual compressibility of a gas, it will be helpful in many problems in the natural-gas and other industries. Although the laws of Boyle and Charles have been and can be applied without introducing significant error in many computations relating to natural gas, with the development of deeper, higher-pressure sources of supply and increased pressures in transmission systems, frequently it is important to know the effect of deviation from the ideal gas laws upon compression and measurement of natural gas, and its flow through pipe lines, and in the estimation of gas reserves.

The new method has been described by E. S. Burnett in a paper, Compressibility Determinations Without Volume Measurements, delivered before the American Society of Mechanical Engineers and published by the Society in the December, 1936, issue of the *Journal of Applied Mechanics*.

"Get Up-To-Date on Gas Service"

A REAL contribution to those who would be informed on the many valuable reports presented at the last annual convention of the American Gas Association has been made by Oscar E. Norman of the Education and Library Division of The Peoples Gas Light and Coke Company, Chicago. Mr. Norman has condensed and summarized the vast amount of material presented at the convention. It is published in an attractive booklet of 64 pages entitled "Get-Up-To-Date on Gas Service."

The booklet has been made available to individual members of the Association. It not only contains summaries and abstracts of papers and reports, but also includes a series of questions based upon the material presented.

Accounting Section

Herbert E. Cliff, Chairman H. W. Hartman, Secretary E. J. Tucker, Vice-Chairman

Accounting Section Organizes Year's Work

H. E. Cliff

THE Advisory and Managing Committees of the Accounting Section met in Association Headquarters, December 16, the chairman of the Section, H. E. Cliff, presiding.

After considerable discussion of the scope of the activities of each committee and of the various suggestions of specific subjects for study during the year, a program was outlined which promises to produce results of definite value to the gas industry.

The standing committees were continued without change from last year. There were appointed six working committees and the chairman of each was selected because of his particular fitness to lead in a study of the matters entrusted to his committee.

Accounting Machines

The scope of this committee is to secure information regarding accounting machines and to keep abreast of improvements so that member companies can receive the maximum benefit from the use of machines in accounting work.

The chairman of the Accounting Machines Committee, James W. Cooke, has announced that his committee this year will concentrate its efforts on a study of Payroll systems, operated both by machine and by hand, in conjunction with records required under the provisions of the Social Security Act. This subject is a large and intricate one and gas company accountants will look forward with interest to the issuance of the findings of this committee.

Customer Accounting

Under the chairmanship of W. E. Scott, the Customer Accounting Committee has decided to give consideration to two subjects, namely, Customer History Records and Averaged or Estimated Bills. It is recognized that the first of these two topics is distinctly controversial and the committee has arranged that it should be handled by two subcommittees, one charged with assembling full information indicating the advantages of complete customer history records and the second group to produce the arguments against complete customer history records. The report on Averaged or Estimated Bills will contain a discussion of their advantages and disadvantages.

By E. J. TUCKER

Vice-Chairman, Accounting Section

Customer Relations

J. Gordon Ross, chairman of the Customer Relations Committee, reports that the committee has decided to make a thorough study of one subject only during the year, and to present one report which will be designed to stimulate the maximum of discussion at the convention sessions. The subject selected for such development is entitled "The Art of Serving." It is intended that the report shall describe the more effective type of service organization within certain companies with respect to set-up and personnel of contact groups, direct and telephone contacts, means of instructing contact employees, cooperation between departments, and all factors intended to simplify and make more satisfactory all customer-contacts.

Office Management

The activities suggested for the attention of the Office Management Committee were as follows:

Health Promotion Activities.
Employee Promotion Schedules.
Wage Incentive Plans for Office Workers.
Supervisory and Employee Group Training.
The Scope and Operation of Systems Bureaus and Internal Audit Bureaus.

After consideration of these suggestions, the selection of the subjects to be studied was left in the hands of J. J. Natale, chairman of the committee.

General Accounting

The General Accounting Committee is under the chairmanship of H. L. Gruehn, who is filling that office for the second year. This committee last year inaugurated a new plan of exchanging ideas and experiences on current accounting problems by sponsoring conferences to which senior accounting executives were invited. The plan was so successful that it is being continued this year.

Uniform Classification of Accounts

The purpose of the Uniform Classification of Accounts Committee is to aid member companies in the interpretation of the Uniform Classification of Accounts in cooperation with regulatory authorities. The chairman of this committee is F. L. Griffith and the membership is composed of experienced accountants representing both the manufactured and natural gas interests.

Editorial Committee

The activities of the Editorial Committee with E. J. Tucker as chairman, will consist of securing articles on accounting topics for publication in the A. G. A. MONTHLY, and of reviewing convention reports of the various committees.

Luncheon Conferences

Following a discussion of possible arrangements for the holding of Luncheon Conferences, the task of working out the details was left with Chairman G. B. Webber and the Luncheon Conferences Committee. It was agreed that the conference subjects would be as follows:

Credits and Collections.
Office Management.
Customer Accounting.
Customer Relations.
General Accounting.

Appliance Sales Reach All-Time High

APPLIANCE sales of the Ohio Fuel Gas Company reached a new all-time record last year, Rowland J. Miller, district sales manager, stated, according to a report published in the Toledo *Blade*, February 9.

Increasing the total volume of business more than 67 per cent over that of the previous year, the company's appliance sales showed a decided gain in all types of gas equipment including ranges, refrigerators, commercial and house heating equipment and water heaters.

Supporting the sales program during the past year was an extensive newspaper advertising campaign which was conducted in more than 140 newspapers in Ohio.

During the year, the Ohio Fuel Gas Co. appliance sales organization won national recognition in the A. G. A. gas refrigerator sales contest, by finishing first in one division of the contest and winning several other high positions in other divisions. Many salesmen also shared in the individual prizes.

The company, is at present engaged in a sales campaign on automatic storage gas water heaters in which they are competing with other utilities of the country in a national sales contest, also being sponsored by the Association.

Prospects indicate an even better year in 1937 for the sale of modern gas appliances, Mr. Miller said, and plans for the coming year include another extensive advertising and sales promotion program.

Commercial Section

F. M. Banks, Chairman J. W. West, Jr., Secretary Hugh Cuthrell, Vice-Chairman

Big Business from Small Homes

By A. F. H. SCOTT

Federal Housing Administration, Washington, D. C.

LOW-COST housing is inevitable. Let's make the big idea of the year 1937 low-cost housing.

Just what is this low-cost housing? Is it simply a meaningless phrase or can we recognize it *today* definitely as a thing of the present? We all know that the market for low-cost homes exists. The demand for them has been accumulating. It is a "plus" market.

However, in developing the subject from the merchandising angle, let's proceed along the old time-tested merchandise formula commonly known to many of you as the 4-M formula, consisting of 4 major divisions beginning with the letter "M."

The first M stands for *Merchandise*. It is natural we begin with the product itself. The product is the "small" house and by small house we mean one that is priced low enough to economically justify its possession by the income of the mass of possible buyers. Now then, first, our small house must be a good product, constructed of quality materials by skilled workmen; second, there must be a need for the product; third, a small house today must be a "package" product, complete in all of its details, literally, with a price tag hanging on the door, so that it can be "sold across the counter" at so many dollars down payment and so many dollars per month.

"Package" Products

Like any other kind of merchandising we must consider our competition—but this does not come from within the building industry itself, but from outside sources. It is the products of other industries—products which are of mobile character—"package" products—which can be taken to the very doors of our prospective customers, like automobiles, radios, electrical refrigerators, amusements—everyone of you here knows what it means to compete for John Q. Public's dollar. So we must prepare to meet this competition with our merchandise which must be a quality product, in "package" form, for which a definite need exists.

The second M stands for *Market* which is determined largely by the extent of the existing need for our product—the small house. Economists variously estimate that there is an accumulated need for new homes that range from 1,000,000 to 2,000,000 houses and that there will be a continued need for 500,000 to 750,000 homes annually for the next 10 years.

During the year 1934 we built in the United States about 50,000 non-farm dwelling units; in the year 1935, about 130,000; and during the year 1936, just past, about 270,000 homes. However, and we quote the Federal Housing Administrator, Stewart McDonald, it is possible we will build between 400,000 and 450,000 homes in 1937. Now let's see what percentage of these are to be supplied by the so-called small house, to that large mass market of low income families who can afford to pay only up to $5,000 for their homes.

Home Shortage

The shortage of small and inexpensive homes is tremendous. An analysis of sales records of the building industry indicates that during the past 8 years the industry, as a whole, has competed for only 20% of the total market, which represents homes costing in excess of $5,000 to build. Think of it, men! Of the 80% market "untapped," a large part of it is spread all over the various trading areas the companies you represent serve.

There is an established relationship between a family's income and the amount that family can properly afford to pay for its home, either on a rental or amortized ownership basis. Economists agree that families should not assume a debt more than twice its annual income in the purchase of a home. Now then, figures compiled by the Brookings Institute for 1929, at the peak income level, indicate that 63.2% of our non-farm families had incomes of less than $2,500. Based on these figures and the assumption that a man should spend not much over twice his annual income for shelter, it is evident that over 60% of our non-farm tenant families cannot afford homes costing more than $5,000. This defines our small homes market and it is up to the building industry to start now supplying the kind of houses which the masses of our population need and can afford to buy, rather than the kind it hopes to build and own some day.

Now there is another angle to this owning of a small home. Let's examine into the capacity of people to buy homes on the basis of what they are today actually paying monthly in the form of rent. The United States Census Report in 1930 shows that 70% of the tenant families paid from $10 to $50 per month in rent. What is the relationship between these rents and the monthly payments that would be required to finance a Federal Housing Single Insured Mortgage on a home costing up to $5,000? Obviously, if the monthly payments are equal or less than the amounts paid for rent, most families would prefer some plan of home ownership promising them as good or better living conditions for the same or less money.

Let's inquire just how much of a home can be purchased on the Insured Mortgage plan with the monthly amounts paid like rent, ranging from $10 to $50. For instance, on the 20-year basis, Federal Housing Insured or Amortized Mortgage plan—$1,000 which represents 80% of the total cost of a $1,250 home can be financed for around $10 a month. Now each monthly installment includes a payment on the principal amount as amortization, interest, mortgage insurance premium, service charge, hazard insurance and taxes. Thus, in multiples of a thousand dollars, a $2,000 mortgage on a $2,500 house can be financed for about $20 a month; a $3,000 mortgage on a $3,750 house, for $30 a month; a $4,000 mortgage on a $5,000 house for $40 a month. It is, of course, assumed that an initial cash down payment of a 20% equity as required by the Federal Housing Administration, has been met by the home owner.

From these figures, it is evident that a large portion out of the 70% of our urban tenant families who pay up to $50 per month in rent have the monthly paying capacity to acquire homes costing up to $5,000, provided houses on which $10 to $50 payments are sufficient can be built in the communities in which they live.

Purchasing Power

The third M stands for *Money* or purchasing power. Today this purchasing power is available both in cash and in credit. The statements of Banks, Savings and Building and Loan Associations and all other types of financial institutions show the "savings of the average American has reached the largest volume in history." In 1935 savings accounts in the banking system alone were around 20 billion dollars, adding to this the money represented by Building and Loan shares and in the admitted assets of life insurance companies, the total approximated 50 billion dollars.

Now, added to this regular amount of deposits and savings we have the recent disbursements of dividends, greatly adding to the reservoir of available cash, plus a third factor which is the continuing favorable effect on the availability of cash by the increase of pay rolls of large industrial

Part of address before Eastern Regional Natural Gas Sales Council, Pittsburgh, Pa., February 4-6, 1937.

concerns, with the trend very definitely toward increased wages among all classes of workers. Certainly *cash is available.*

Now what about the availability of credit? Today we have thousands of Banks, Building and Loan Associations, Insurance Companies and other lending institutions actively engaged in lending money to finance home construction, plus the recent activity on the part of finance companies to reach this new market for credit. To date, the Federal Housing Administration has accepted for insurance well over a half billion dollars worth of home mortgages and both the number and dollar volume of mortgages being submitted to the Federal Housing Administration for insurance is consistently increasing. There is no question, gentlemen, that there exists an almost unlimited source of credit with which to finance new home construction.

Man Power

There is one more factor necessary to assure the success of our program, the fourth M in our formula—*Man Power.* Our task is to get this "untapped market" of business organized. Skillful selling is the only important problem remaining in connection with the full measure of success assured by the first three M's.

Bear with me a little longer as I develop for you the various elements present in this new construction market. Perhaps some of you are already acquainted with the small house demonstration which was undertaken by the National Lumber Manufacturers Association at Bethesda, Maryland, just outside of Washington, D. C. last summer. These houses were illustrated in the FHA Technical Bulletin No. 4. NLMA set out to make a sort of laboratory test of the principles outlined in this bulletin and actually built 3 demonstration small houses known as houses "B," "D," and "E," using their own architect and their own local contractor-builder and local materials. They wanted to see if these houses really could be produced at prices ranging from $2,500 to $5,000. The demonstration assured the Association that Federal Housing's principles of planning small houses were sound and that houses could be built within the price range indicated by the Federal Housing Administration. It was at the time following the Bonus payment. There were over 300 applicants to purchase these houses when completed and over 50 people were there to put "the cash on the line." Most certainly the demand exists!

Thus with the Bethesda project as a pattern, the National Lumber Manufacturers Association conceived the idea of launching a nation-wide home building demonstration program, the object of which would be the construction of one or more small houses in at least a thousand different communities throughout the United States.

They set as their principal objectives: first, to prove to the local lumber dealer that the so-called small house can be built including minimum comfort requirements and sold at a fair profit and within a price range that will attract the masses of possible buyers in the lower income bracket.

Second, to demonstrate to the prospective home purchaser in the local market that the small house is not only theoretically practicable but actually available and thus develop a sales program to build these low cost homes for this "untapped" and "plus" market. The start has already been made and the small homes demonstration program is being presented to the various territorial groups of lumber dealers in their State Conventions. The Manufacturers Association is providing the interested dealers with working drawings, specifications, material lists, and detailed instructions for the building of the houses "B," "D," and "E." The distribution is through their own state dealers association, which in turn follow through to make certain that proper use is made of these plans and that actual demonstration homes will result and that the local lumber dealer becomes the local housing headquarters for his community.

Gas Market

Just what has all this story of a small homes demonstration program have to do with you? For

1. You have all heard before about "a vast construction market" and how to go about and insure the complete installation of your gas equipment.
2. You have been told many times that failure to recognize this increasing and "plus" market for your various retail sales departments naturally retards your general progress.
3. From every side you have been made aware that your competition is alert and that it is preparing to get its share of this "vast construction market" which is evidenced daily by aggressive advertising and publicity; and by timely planning and merchandising.

I am informed, for instance, that the gas industry enjoys over 90% of the cooking load throughout the United States. As a heating man I know too that yours is a fuel that truly becomes automatic heat. Again it is not really necessary to remind yourselves that as new construction goes so goes the future of your business as to replacement of your equipment. Therefore getting your share of this small homes market, that we are discussing, means not alone greater profits (possible gas load to you) these next few years but actually insuring your future replacement business as well.

We all know that new construction sets the trend in what is really modern for homes of today and next year and the years following. So it is up to you creative minded salesmen to associate gas in the minds of your public with what is really new and modern in 1937 small homes. Each of you individually know what your "own stake" is in this market. Would I dare say a reasonable quota should perhaps be one in every four of the new homes being built in your various trading areas? Of course, everyone of these seven million new homes to be built in the years ahead have new kitchens and there is a large number of them that will have basements and heating systems. So it is really up to you to develop as many as possible potential customers for your modern gas appliances. Now then, —what to do about it.

F.H.A. Help

Let's first see what your Federal Housing Administration is doing to help you locally.

1. As you have perhaps heard, we are sending trained crews of representatives to approved mortgage lending institutions throughout the country to represent facts that show that people within the low income brackets are good risks and that now is the time to reach for the volume of financing that "is coming in like the tide" with the small home program.
2. The Administration is endeavoring to bring the operative builder to the realization of the necessity of making mass production homes available in selected areas, which means in many of your own trading areas.
3. The Technical Staff is holding local conferences on modern design of small homes as covered in our Technical Bulletin No. 2, and goes over the sample plans of houses "B," "D," and "E" and shows the local contractor builder how to use available materials and how to do away with excessive waste on the job. This, as you know, usually amounts to between 10% and 20% in the waste of materials delivered to the lot for a job, plus the loss in the labor in cutting and fitting same. Therefore, if standard lengths and sizes of material would be used, there would be a decided saving both in material as well as in labor cost.
4. Now then, right down your own alley! The Administration has contacted the principal manufacturers in the heating, the plumbing, the electrical, the gas appliance and equipment business and other "allied" industries, and is directing their attention to the opportunities that now exist in domestic home equipment, appliances and allied material industries field. We suggested that the manufacturers get up a "package" of their own products and equipment suitable for the houses "B," "D," and "E." Next, to advise their distributors and local dealers and you, their retail outlets that they have "packages" of products particularly selected and designed for this small house program. No doubt you already have had such in-

formation passed on to you from the various sources with whom you deal, offering you the very latest in "packaged" equipment and products, that properly become a part of the demonstration house and so priced as to be comparable with the various other costs which are a part of the total cost to build the demonstration home in your communities. And obviously, by now your own retail sales departments should be preparing to contact the local lumber dealer who is sponsoring the small homes demonstration project in each of your trading areas.

5. Further, the Administration is preparing plans for the participation of local retail department stores which have as large a stake as any other allied interest in your community in seeing that these small homes are properly furnished and equipped. This information is reaching them now through their National Retail Dry Goods Association.

6. Next, the Federal Housing Administration is getting the story of the small homes program to the public through the major market newspapers which cover the entire housing market and you can expect splendid support of your local press in this important community program.

7. May I make clear here that our policy is that the Federal Housing Administration will have less and less to do with the public which, after all, is really your own job; and that we will intensify our activity and contacts with industry in order to get all the various "allied" interests synchronized and cooperating in the small homes program.

How To Cooperate

Now then, I hold here a copy of the "People's Book" which is being given you at this meeting by the National Lumber Manufacturers Association, just as they gave it to the local lumber dealer who will sponsor his small homes demonstration unit. In it you will see the lumber dealer is told how to get his share of business by "demonstrating his wares,"—how to make building arrangements with his contractor-builder and various "allied" dealers—like yourselves;—how to build the demonstrator; how to advertise the demonstrator; and how to open the demonstration house for display, at the time of the National Demonstration Program to be held on Saturday, May 1, at 2 P.M., throughout the nation.

It should now be obvious what opportunities exist for you in this small homes program. Most certainly you will contact the various local lumber dealers and make arrangements to work with them wherever possible. Just who these lumber dealers are that are participating or in fact, any other information you might like to have concerning the whole small homes program can be obtained by getting in touch with your own Association Secretary or directly with the National Lumber Manufacturers Association in Washington.

Surely greater profits (possible gas load to you) are ahead in the next few years as you get your share of these millions of new homes being built. It almost goes without saying that such an increase in load and consumption of gas should be a means to cut your production costs and make for lower gas rates—a benefit which you have been striving to pass on to the public for a long time. It is now within your grasp as you expand your sales into this "untapped market" for small homes, for now you are reaching the buying public of the lower income brackets who are seeking to own a small home on a basis that they can afford. And it appears obvious that it is up to you to associate gas in the minds of this buying public with what is new and modern in 1937 small homes.

May I add that similar programs for small homes at low cost for the same potential buyers are being sponsored by the Brick Manufacturers Association of America of Cleveland; and by the Portland Cement Association of Chicago. No doubt, you will hear presently about these activities, and should accordingly plan your local cooperation and participation.

Now if there is anything that we of the Federal Housing Administration may do for you here, be sure and call upon our closest local office with its staff of trained assistants, or if we can be of any technical assistance to you in Washington, feel free to call upon us there—anytime.

The opportunity is yours.

We all agree that people want low cost homes, in fact they demand them. The average American has been encouraged to expect them and now it is up to all of us to show these small homes and make the number one public habit of American people the habit of owning their own new home.

FIELD FOR UNIT HEATERS

(Continued from page 100)

ket, so just what can we best do to develop this great new market with as much rapidity as possible? I think that we need most a unit heater sales attitude.

A great many of us have been engaged in the sale of home heating equipment for a number of years. In the sale of that type of equipment, we have followed certain procedures, set up certain customs and, while they are excellent for the purpose for which they are designed, I do not believe that they fulfill all of the requirements for the sale of gas-fired unit heaters. In the merchandising of gas-fired unit heaters, we must bear in mind always that we have a business proposition to offer to a business man. Our attitude cannot be the same as it is when we call on the home owner. We want to stress convenience and leisure to the store owner it is true the same as we stress greater convenience and leisure to the home owner, but in talking to the store owner about the fundamentals of gas heating which are convenience, cleanliness, leisure and the removal of the hidden cost, we must approach him from the two important factors which interest him more than anything else in his business workaday world. These are

1—How he can reduce his overhead.

2—How he can make a greater profit.

Case Studies Needed

Every approach that we make to this man's buying urge must be based somehow upon one or the other of these fundamentals. To those of you with whom I had the pleasure of discussing unit heater problems last year I should like to say again that we can appeal to one or the other of these fundamentals by showing the business man that we are in a position to solve for him some of the neediest problems he has had during his entire business career. Unless you make an actual investigation yourself, you have no idea of the amount of money, time and trouble an improper heating system causes a store owner. If his store is in an unfit condition to receive his customers due to drafts or overheating, then he is not in a position, no matter how clever he displays his merchandise or how well designed his merchandising appeals may be, to force from his buying public the accumulated shopping time upon which he is so dependent. Dirt and grime are bad enough in the home where private belongings are often ruined by dirt producing heating systems, but just imagine how much more of a concern this must be to a store owner displaying new merchandise for sale.

Then there is the problem of space. Space is the life blood of any store. Every available square foot of floor area in the store must be on a productive basis. If it is not, overhead immediately jumps and the store owner finds himself in the very awkward position of not being able to meet his competition on an equal footing. With space-wasting heating equipment he has no chance to rectify this condition, but with the gas-fired unit heater installed up off the floor out of the way he can convert much of his wasted space into profit-producing areas. And so, I should like to reiterate that we go to the commercial owner with a story of service in the solution of some of his worst problems that put his place of business, whether it be a store, a restaurant, a tavern or what have you, in a position to reduce its overhead and consequently increase its profits.

Now then, there are two important things to accomplish in telling this story. In the first place, where are we going to

tell it, how shall we originate these prospects? The answer to that is exceedingly simple even though it is coupled with a lot of hard work. I think the most important factor in the successful development of the gas-fired unit heater market is the observation of the need. Almost every commercial establishment that you enter has some need of a gas-fired unit heater. If we do not observe this need—if we do not sort out the places in our territory where a gas-fired unit heater would make a definite contribution to the place of business, then we cannot hope to develop our market anywhere near the proportion to which it should grow.

Educating the Buyer

That brings us to the second important factor in the sale of gas-fired unit heaters, and that is educating the buyer. How very many, many store owners you could go to right now and after mentioning the name "gas-fired unit heater" await forever some sign of response from them as to what you were talking about. The boiler manufacturer, the radiator manufacturer have the accumulated years of advertising and public acceptance behind them so that in a majority of cases when anyone thinks of heating, they think of it in those terms. What we must accomplish is a gigantic task that is true, but one which is not an impossibility. We must let the commercial business man know that there are such things as gas-fired unit heaters, that they are easy to install, that they can be used in conjunction with any type of heating system, that they can be installed exactly where they are needed most, that they can be installed without interrupting his normal business procedure, and that for what they produce they are far lower in cost both as to original equipment and as to cost of fuel. These men first must understand exactly what we mean when we say unit heater—that here is a self-contained piece of heating equipment which will supply his establishment with warm, constantly circulating, clean air. If we can do this, I think it takes little stretch of the imagination to understand what a great volume of business it is possible for us to do.

Now then, in the final analysis of developing the potential for the gas-fired unit heaters, I would like to make what might at first seem like a contradictory statement and that is "don't sell unit heaters, sell better business." A moment or two ago I said we had to educate the people who constitute our buying public in what exactly was a unit heater and how it operated, and this is true. We must do this very thing, but we must not do it by piling up in front of them complicated mechanical discussions which make the equipment sound a great deal less simple than it really is. When we discuss unit heaters with a man, it is enough to tell him that it is a product consisting of a heat chamber over which air is forced so that it is distributed throughout his business establishment. He doesn't have to know anything about the type of burner or the type of tubes or all of the technical features that we must know. There are occasions, yes, when you find the mechanically minded individual to whom you will have to give full explanations of all the working parts, but to the average individual our story is to sell better business.

The unit heater makes definite contributions to any commercial establishment. These contributions are easy to enumerate. They give him first, freedom from the dirt and the film that other types of fuel pour into his place with the consequent ruination of his stock. Second, gas-fired unit heaters give him freedom from worry over constantly changing heating equipment conditions. They are controllable to the point where he will never have to concern himself with the overall average temperature of his place. Third, they give him heat where he needs it most—in any part of his place. Fourth, they reclaim for him all of the thousands of square feet of floor space now taken up by the old out-moded type of heating equipment and radiation. Fifth, they offer him freedom from repairs and servicing worries with their consequent cost. Sixth, but not by any means least, they save his time, time in tending his heating plant, time wasted in trying to control it, time wasted in trying to keep his stocks clean and fresh and time wasted during installation of more complicated equipment. These are what we must take to the business man. These are the wedges with which we must gain entry into this already booming market and, if we use them and use them repeatedly, we will eventually and not very long hence gain an acceptance for gas-fired unit heaters which will make our volumes, encouraging as they look now, seem puny and unimportant.

Appliance Sales Increase in Brooklyn

Clifford E. Paige

IN his annual report to the stockholders of The Brooklyn Union Gas Company, Clifford E. Paige, president, points out that new business efforts of the company received considerable encouragement this year from the new promotional rates which became effective December 15, 1935. Appliance sales reached the highest dollar total in the history of the company. Sales of nearly $3,000,000 representing a total of 27,711 gas ranges, refrigerators, water heaters and house heating units were made during the year. Included in this number are 2,363 house heating units which were sold as a direct result of the promotional rate.

In the industrial and commercial fields, Mr. Paige reports, the new gas rates have opened up prospective business in water and space heating and air conditioning. An encouraging increase in volume of business for industrial and commercial uses of gas was obtained during the year.

The achievement of a record sale of gas appliances during the year is attributed by Mr. Paige jointly to the effect of the new rates and the excellent cooperative effort of the employees, operating through the Employees' Sales Promotion Plan, the Sales and Home Service Divisions and plumber dealers. Employee leads resulted in the sale of 2,439 appliances. In addition, employees purchased for their own use 603 appliances. Plumber dealer business resulted in sales of appliances amounting to $1,054,981.58.

The Home Service Division of Brooklyn Union during the last year recorded an attendance of 23,385 women at demonstrations and cooking classes. This division distributed 375,000 recipe sheets to customers.

It is pointed out in the annual report that the New York World's Fair will be located for the most part in the company's territory. The basic theme of the Fair is to portray the future, and present indications are that gas and its many uses will play an important part in this demonstration. Complete facilities for all kinds of gas service for the fair are already being arranged.

Employee Load Builders Set New High

GAS company employee load builders of the Consolidated Edison Co. of New York set a new high record in 1936 with gas appliance sales of $146,907 credited to them. This compares with $127,104 for 1935, an increase of nearly $20,000, or 15.58 per cent.

During the year gas employees submitted a total of 5,369 leads for appliance sales; 757 bonus checks were issued to them for their efforts.

It is estimated that the 1,442 gas appliances sold from these leads will use a total of 87,000,000 cubic feet of gas a year.

C. E. Muehlberg, chairman of the Employee Load Building Committee, stated that total sales from employee leads have been increasing regularly during the past four years.

Industrial Gas Section

Ralph L. Manier, Chairman Eugene D. Milener, Secretary Hale A. Clark, Vice-Chairman

The Story of Gas in Beauty Shops

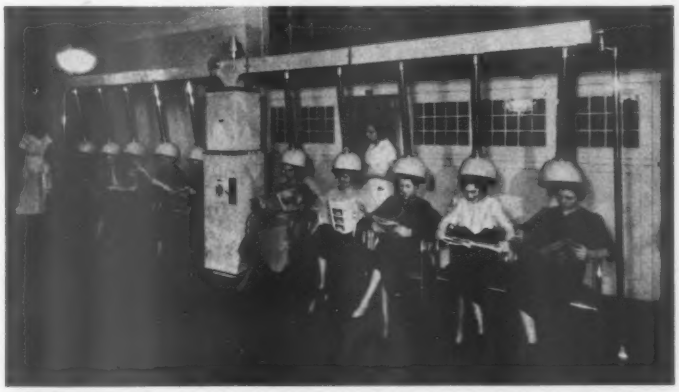
Herewith is a sample of the series of articles which the Industrial Gas Section is supplying to the trade magazines in several fields. It appeared recently in the American Hairdresser with ample illustrations. Four nationally known manufacturers of gas operated beauty shop equipment cooperated in making a prominent gas section by running full page colored advertisements, which, together with the A. G. A. ad, occupied 8 pages. A streamer across the top of each page read "Gas-Fired Equipment for Beauty Shops."—Editor.

EVERY shop owner is cognizant of the rapid progress made in beauty shop technique of every sort during the last decade. This accelerated progress has brought not only an elevation of professional efficiency but also an improvement in all types of products and equipment essential to beauty shop services. A hairdresser of many years standing in the field, attending a recent trade show, waxed enthusiastic about this progress, in which manufacturers in the field have paralleled the advance in the sphere of personal ability. Each improvement in beauty shop services to American womankind has been attended by a like progress in the development of new products and equipment which enhance these services to the consuming public. From permanent waving down through the whole gamut of facials, scalp treatments and manicuring, inventive genius has been the mainspring of new developments which have resulted in better methods as well as new opportunities for better services and profits.

Because heat is an essential in many beauty shop services, the improvement in equipment and the adaptation of heating fuels are vital factors to every shop owner. Electricity as a heating agent in permanent waving and hair drying invariably first comes to mind. However, gas as an economical fuel for providing the higher temperature needed in many beauty shop operations is receiving greater attention on the part of shop owners and manufacturers. Research studies by engineers and laboratories disclose the interesting fact that gas as fuel is providing marked economies in many shop essentials, such as hair drying, air conditioning, water heating, the usual heating of shop premises during the winter season, and even in providing the heat essential to permanent waving. While gas as a heating fuel in permanent waving is still in its infancy, several manufacturers already have developed gas-fired permanent wave machines which shop owners in many sections have found most economical from the standpoint of operating costs and flexibility.

In hair drying without doubt the individual hair dryer operated by electricity seems best suited to the needs of the average small shop. Some of these individual dryers employ both gas and electricity in their successful operation, but where the shop patronage or business is so extensive as to require the multiple system dryer, gas has been found the most economical fuel. This is evidenced by the increasing sale of system dryers of all types. The manufacturers of such system dryers, many of whom are also makers of the individual type of electric dryers, have introduced many improvements during the last few years. The economies of these system dryers, in which gas is the heating fuel, have been substantiated not only by the experiments of manufacturers themselves, but also amply supported by the findings of the American Gas Association. With few exceptions, depending upon geographic location and the character of gas supply, system dryers have found great favor with the key beauty shops of the country.

The operation of these system dryers is automatic and silent. Once turned on, the system requires little attention. Thereafter, it will furnish all the warm air required at any temperature desired and this temperature is maintained mechanically. The air temperature of some may be regulated at the hood. In this way the individual customer's comfort can be easily catered to. Those who want a quick hot dry and those who desire a cooler although longer dry can both be accommodated at one and the same time. It has been reported that the saving of gas over the current using type range to 50% or better, depending upon geographical location, and character of gas supply and time required to dry a head of hair with gas as compared to electricity.



An attractive gas-fired installation in a beauty school

Summer air conditioning has swept our industry during the last few years. An increasing number of beauty shops are finding temperature control an indispensable means of holding and attracting trade, particularly during the warm weather months. The fact that air conditioning as a modern feature of beauty shop operation is a means of stimulating business, is too well known to need emphasis here.

By air conditioning we do not mean simply cooling the air and leave it chilly and clammy. That is almost as bad as no cooling. By air conditioning we mean fresh air properly reduced in humidity and properly cooled.

Three manufacturers have already developed economical air conditioning units for beauty shops depending upon gas for operation. Such installations in various parts of the country have proved most successful and from the standpoint of efficiency and economy of operation, they are exemplary. These machines completely absorb the moisture from the air. The dry air is then mixed with fresh air and cooled. Subsequently, the moisture is blown into the room or premises. This process is continuous and both the dew point and temperature of the air are under separate automatic control.

Every beauty shop needs hot water and lots of it. Gas water heaters have been in use for many years and when gas-fired have been found most economical in operation. During the winter months, the heating system of many beauty shops is hooked up

with hot water supply and in some instances this has proved satisfactory. However, there must be an adequate hot water supply at all times and the gas water heater has become the best solution of this problem. Water heaters are available which burn gas only as the hot water is required. This prevention of waste is accomplished by a simple thermostat which shuts off the gas burner when the water in the storage tank is hot, and turns it on when more hot water is needed. In the instantaneous, tankless type, the gas is turned on by the action of opening the water faucet and off again when the faucet is closed. For the small shop, the ordinary heater used in residences is sufficient. For larger shops, a properly sized heater is necessary.

Heating the beauty shop during the winter months is not a problem today. The shop owner has the choice of a gas-fired heating plant located in the basement, the usual coal furnace or the oil burner. Selection of the most economical type without doubt depends largely on fuel costs, sources of supply and the geographic location of the establishment. Gas heating is, of course, automatic, and cleaner when compared to either coal or oil.

The development of permanent waving machines depending upon gas for operation is still in its infancy, as previously stated. One manufacturer now is offering a gas-fired permanent waving machine and buyers of the equipment have found the system both fool-proof and economical. Without doubt a careful analysis of fuel costs and other elements is necessary to determine the position of the gas permanent waving machine as compared to the other types.

No shop owner should lose time, money or customers through faulty, balky appliances in this modern day and age. Perfection in equipment and automatic operation has reached such a high degree that frequent and prolonged shut-downs and messy repairs are no longer necessary. It behooves every shop owner to weigh carefully the element of feul costs in determining upon the equipment that will serve the shop requirements most economically and most effectively from the standpoint of customer convenience. The analysis is not an easy one, but it is certain that careful study of every factor involved, with the assistance of specialists, will bring its rewards. Since profits are always predicated on costs, the wise shop owner does not overlook the cost of the fuel that drives or operates the equipment on the floor.

First Gas Heated Bath House in Chinatown

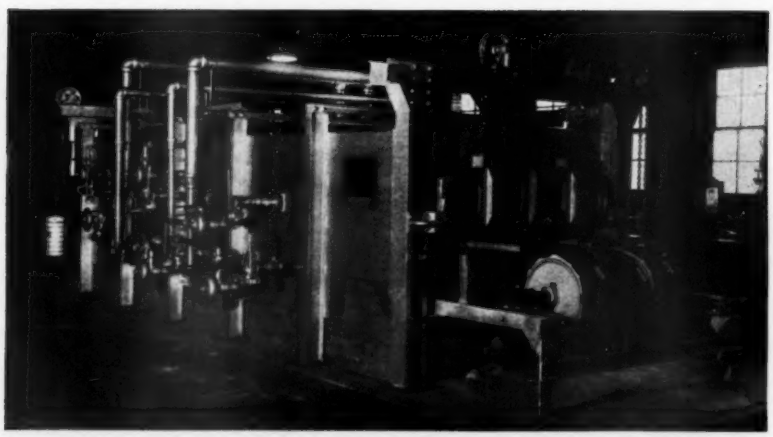
EVERY day is Saturday in Kim and Hahn's new barber shop and bath house at 34 Mott Street—New York City—the first gas heated bath house in Chinatown.

Finding that they could heat water for all purposes as well as the premises with gas at the new reduced house heating rate, the proprietors were quick to sign a contract with the Consolidated Edison Co. of New York. They bought three automatic water heaters and three heatrolas.

Since January 12 Kim and Hahn have gone about their business in comfortably gas heated rooms. Customers luxuriate in gas heated hot water as they sit in the three barber chairs on the main floor or use the five bath tubs and three showers in the basement.

The yearly gas consumption for this contract is estimated at about 500,000 cubic feet.

INDUSTRIAL · GAS · AT · WORK



THIS AUTOMATIC HEAVY DUTY GAS FURNACE AT BRANTFORD, ONTARIO, HARDENS PLOW SHARES FOR USE IN CANADIAN WHEAT FIELDS

GOING AHEAD

WITH INDUSTRIAL GAS

The number of manufacturers who are now making luminous flame industrial gas burners is growing. It's a far cry from the old bat's wing gas lights that depended upon high candle power gas to the big luminous flame burners of today. Research has found out how to do it with low candle power gas.

Looks like 1937 will be the biggest year yet for gas engines. One thing, gas men would never be satisfied with gas engine exhausts smelling like the exhausts of busses do.

This has been a banner season for unit gas heaters, showing that the right kind of commercial gas appliances can be sold in a big way.

C. M. Kemp Manufacturing Company and G. S. Blodgett Company are the latest manufacturers to adopt the Industrial Gas Section's advertising slogan-chart for their advertisements in national trade papers. Nice work—the more times it appears the more effective it is for everybody.

Short cycle malleablizing with gas has been cut from 2½ and 3½ days down to 31 hours. There's more to selling gas than merely displacing B.t.u.'s with B.t.u.'s. Short cycle malleablizing was one of the early projects of the Committee on Industrial Gas Research.

The Sears Roebuck building in Dallas is air conditioned in the summer with gas. Two 120 H.P. gas engines do the trick. That's real load building.

Members of the Industrial Gas Section who want a quick synopsis of the Section's committee reports and papers for 1936 should read the Industrial Gas portion of the booklet "GET UP TO DATE ON GAS SERVICE" by Oscar E. Norman, Librarian of The Peoples Gas Light and Coke Company. Mr. Norman hasn't missed anything.

The Program Committee of the Industrial Gas Section has prepared the program for the industrial session at the Natural Gas Convention in Kansas City. This is the first year the section has cooperated at this convention. Frank H. Trembly, Jr., and W. Jennings Young are chairman and vice-chairman respectively of the Program Committee.

Technical Section

M. I. Mix, Chairman H. W. Hartman, Secretary J. V. Postles, Vice-Chairman

Annual Distribution Conference To Meet at Washington, D. C.

D. P. Hartson

By D. P. HARTSON

Equitable Gas Company, Pittsburgh, Pa.

WASHINGTON, D. C., the focal point of so much attention for the past four years, is to be the Mecca of distribution men April 12-14. With all due respect to cherry blossoms and meetings of Congress, it is expected that the quality of the program will attract distribution men from all over the United States in greater numbers than have ever attended the Distribution Conference. It is expected that many of the distribution men in the East who were prevented from attending the Memphis, Tennessee, meeting either because of distance or because of work resulting from the spring floods of 1936 which were widespread, will be in attendance at the meeting in Washington. There are many things pointing to one of the largest and best Distribution Conferences ever held. The meetings are to be held at the Wardman-Park Hotel, which is ideally located and equipped for such a series of meetings.

Harold L. Gaidry, of New Orleans, is acting as chairman of the Luncheon Conference Committee, and has made plans for meetings which are to a large extent similar to those held so successfully at Memphis in 1936 and at Cleveland in 1935. Mr. Gaidry discusses these luncheon conferences more fully in an accompanying article.

Program Topics

The subjects of prepared papers cover a wide field of distribution activities and problems and in many cases are the result of a very considerable amount of study and research on the part of the author. Such a paper is the one to be prepared by A. Gordon King, service engineer of the American Gas Association, who will deliver a paper on "The Effects of Gas on Trees, Shrubbery and Other Vegetation, and Possible Remedies." Mr. King has devoted considerable attention to this study over the past years and is familiar with the work which has been done in many parts of the country towards the revivification of trees and shrubbery which have been affected by gas. This paper should be interesting to every gas distribution man.

Because of the unusual amount of activities in many cities where considerable house heating has been placed on gas company lines, it was considered very essential that distribution men be given more information regarding what this house heating business and what house heating installations mean to the distribution man. H. B. Johns, of The Peoples Gas Light & Coke Company, Chicago, will deliver a paper dealing with the influence of house heating on gas distribution. Mr. Johns will discuss not only the experience of Chicago but of many other places in handling the problems brought to the attention of the distribution man by house heating installations.

R. E. Finley, of the Dayton Power & Light Company, is to discuss "Recent Developments in Reduction of Joint Leakage by Use of Fluids Such as Carboseal." Many companies have had considerably more experience along this line than when the subject was last brought up for discussion in a Distribution Conference. Mr. Finley, because of his experience, is in an excellent position to discuss the experience not only of his own company but of many others in the matter of reduction of joint leakage.

Much has been written in the past regarding cathodic protection of pipe lines, but in practically all cases such information referred to transmission lines. Many distribution men have asked the question whether or not cathodic protection could be used in city distribution work with its intricate array of underground structures. Very few distribution men claim to understand the A B C's of cathodic protection. A. V. Smith, of the U. G. I. Company, Philadelphia, is to deliver a paper on "Fundamentals of Cathodic Protection," which should tell us some of the possibilities of this medium in combating corrosion.

Change-Over Problems

Many companies have had occasion to change the gas which they were distributing within the past few years. Some companies which formerly distributed manufactured gas are distributing a mixed gas or straight natural gas. Very little was known at the time of the change-over about what the effects of the new gas would be on joints, meters and appliances, etc. C. D. Robison, operating engineer, Metropolitan Utilities District, Omaha, Nebraska, is to give us a paper on the effects which changing the nature of the gas distributed has on pipe joints and other equipment, also on the matter of service complaints from customers.

S. P. Cobb, consulting engineer, New York City, is to deliver a paper on "The Determination of the Moisture Content in Gas and the Effect of Varying Humidities on Volumetric Factors." This is a subject which is interesting not only to the technical man who is in charge of testing or measurement, but also to distribution men in general. Mr. Cobb has devoted considerable time to research along this line and his paper should be of considerable interest and help to the distribution engineer.

In addition to the prepared papers and the luncheon conferences, there will be reports of various subcommittees. D. P. Allen, of the Washington Gas Light Company, will report for the Subcommittee on Meters, outlining the work which is being done by this committee and giving a forecast of what is to be done in the future.

Erick Larson, chairman of the Subcommittee on Gas Main Structural Strength will outline the work which his committee is starting. The program of this committee includes a study of frost conditions, a subject which is of vital interest to all dis-

Gas Analysis Corrected

An error has been pointed out in the article "Determining Gas Combustion Characteristics" by J. F. Anthes which appeared in the February issue of the A. G. A. MONTHLY.

On page 78 of that issue the following analysis appears in connection with the use of Chart 1B:

CO_2	11.6%
O_2	2.2%
CO	2.4%
N_2	83.8%
	100.0%

The correct analysis which should be used with Chart 1B is:

CO_2	10.6%
O_2	1.2%
CO	4.4%
N_2	83.8%
	100.0%

tribution engineers located in the northern part of the country.

In the report of the Subcommittee on Pipe Joints and Pipe Materials, L. W. Tuttle, of Oak Park, Illinois, chairman of this subcommittee, will discuss the further work which they have done in formulating specifications for welding and welded joints. Mr. Tuttle's committee made a very excellent start on this work last year and further information along this line will be very helpful. Under Mr. Tuttle's direction the Subcommittee on Pipe Joints and Pipe Materials is combining specifications received from various leak clamp manufacturers and is preparing this information for distribution. The matter of proper installation of leak clamps is one which has been up for discussion at many of our Distribution Conferences. The committee's report on this subject will be very helpful.

All of the subjects to be brought up for discussion or to be covered by prepared papers are interesting to distribution men regardless of whether or not the gas with which they have to deal is natural, mixed, or manufactured. Open discussion will not be limited to the Luncheon Conferences. As much as time will permit, the authors of the papers mentioned above will be ready to answer questions from the floor and open discussion will be encouraged.

The Wardman-Park Hotel is reserving large blocks of rooms at very reasonable prices for the period of the conference. Make your plans now for being at the conference in Washington, D. C., April 12, 13 and 14. You can't afford to miss it.

Distribution Committee To Continue Luncheon Conferences

By H. L. GAIDRY

New Orleans Public Service Inc., New Orleans, La.

ANYONE attending the 1936 Distribution Committee Conference could see from the reception given the Luncheon Conference idea that there is no doubt that the small group get-together is now a very definite and important part of the annual meeting.

The 1937 Distribution Committee will, therefore, continue the small group get-together by again offering five round table conferences, each in charge of an experienced distribution man, which will meet in separate rooms at noon of April 12 for luncheon. Each conference will again have the entire afternoon of the first day for discussions of the many subjects which will be brought up. These small groups offer an excellent means for everyone to voice his own ideas and opinions without the least hesitation, since there will be no stenographic notes made during any of the Luncheon Conferences.

Realizing the impossibility of an individual attending more than one, yet being very much interested in the subjects of several conferences, the committee has again arranged to have one general session devoted entirely to a complete review of the subjects discussed in all five Luncheon Conferences. The review of each of the conferences will be presented by the chairman of that conference, after which there will be sufficient time allowed for any further discussions from members unable to attend a specific conference, as well as further discussions from members who attended the conference, but were unable to obtain all the information desired.

Due to the attendance and very lively discussions at the 1936 Luncheon Conference on "Meters," "Pipe," and "Portable Equipment," the committee feels that these subjects are of sufficient importance to justify their repetition. Therefore, one Luncheon Conference will be devoted to each of the above mentioned general topics, where discussions may be continued on meter diaphragms, valves, and new meter design; the uses of new mechanical joints, experience with copper services and protective coatings for gas mains and services. Also, there will be much discussion on the experience with recent developments in portable equipment such as air compressors, individual power units, power take-off units, and many other subjects depending on the Luncheon Conference the member chooses to attend.

In addition to the above, there will be a Luncheon Conference devoted to discussions on "Customer Service," which is intended to more or less combine last year's Luncheon Conference on "Appliance Servicing" with the one on "Regulators, Automatic Controls, etc." In this meeting there will be discussions on subjects such as: the amount of free service which should be rendered; how should house heating equipment be taken care of with its many automatic features; pilot stoppages; and experiences with flexible personnel for meeting peak service demands. This meeting will also include house regulators, automatic loading devices and thermostatic control equipment.

The fifth Luncheon Conference will be devoted to employee training covering such points as the correct method, value, and necessity of training employees; also the relationship of the distribution employee to the sales organization and to the customer. This Luncheon Conference should prove very interesting and of much value to the distribution engineer.

Since there is no set program outlined for the Luncheon Conferences, it is impossible to even suggest the many subjects which will come up for discussion. Everything is being done to make these meetings very informal in order to prevent any possible embarrassment to anyone unaccustomed to public speaking, and to make each man feel as if he were discussing the subject across his desk.

Don't fail to get your Luncheon Conference ticket at the time you register in Washington on April 12.

THE HOUSE PRACTICAL

(Continued from page 98)

the "Cycle of Service," "Cooking by Time and Temperature," "Grilled Dinners Mean More Freedom," and "The Road to Winter Comfort." This form of entertainment and instruction is popular with evening groups.

Considerable gas equipment has been sold through leads obtained through the House Practical. Also, requests for estimates on house heating, cooking lessons, etc., have been made. A large number of house plans are given to prospective builders.

MODEL GAS KITCHENS

(Continued from page 95)

tive exhibit kitchen where the appliances may be demonstrated in natural and well-harmonized surroundings. As a place to illustrate theories and practices of modern kitchen planning it is invaluable for it proves that the Industry with the aid of manufacturers, has evolved a new style of realistic beauty in keeping with today's practical need.

No sales person can hold the attention of a group of eight or ten people in a showroom by a sales talk, no matter how enthusiastic his presentation may be. But it is no trick at all and can be done many times a day in a model kitchen.

A woman may be reluctant to casually inspect a range on the salesfloor but she does so automatically when in a model kitchen.

As a promotional enterprise to further the sale of gas and gas appliances, the well designed model kitchen is sure to more than pay for itself.

Add Stoopnagle and Budd definitions—A modern gas range is something that after you have it, you wonder how for goodness' sakes you ever got along without it, and it's cheaper.—L. H.

The success of the Gas Industry will never be found in the arena where decisive battles take place, but in zealously and confidently applying each hour to its service.

Testing Laboratories

R. M. Conner, Director — Managing Committee: J. S. DeHart, Jr., Chairman — N. T. Sellman, Secretary

Requirements Subcommittees To Be Reorganized

By FRANKLIN R. WRIGHT

A. G. A. Testing Laboratories

IN line with actions taken by the Executive Board of the American Gas Association and the Board of Directors of the Association of Gas Appliance and Equipment Manufacturers late in 1936, the A. S. A. Sectional Committee, Project Z21, A. G. A. Approval Requirements Committee, headed by R. B. Harper, vice-president, The Peoples Gas Light & Coke Company, approved at its meeting January 15, plans for the complete reorganization of all requirements subcommittees. The new plan becomes effective as of July 1, 1937.

Under the new arrangement, the term of office of all subcommittee members will terminate on July 1 next. Notices to all subcommittee members to this effect were mailed over Mr. Harper's signature on January 23. The text of Mr. Harper's letter is given below:

Rotating Membership

"It has been felt for some time that a definite plan should be evolved for the purpose of rotating the membership of our various subcommittees so that a larger number of companies might be represented over a period of time while retaining the present orderly functioning of the various groups. In line with this thought, the A. G. A. Approval Requirements Committee, at its April 23-24, 1936, meeting, appointed a special Subcommittee on A. G. A. Requirements Committee Procedure and Personnel and instructed this group to consider the revision of rules for committee procedure and the possibility of rotating subcommittee membership.

"At the second meeting of the Joint Committee of the American Gas Association and Association of Gas Appliance and Equipment Manufacturers on Laboratory Policies, held in New York City on September 30, 1936, representatives of the latter organization suggested certain changes in the procedure relating to the appointment and term of office of requirements subcommittee members. Conforming with suggestions of the manufacturers' group, the Joint Committee unanimously adopted a resolution to the effect that the Executive Board of the American Gas Association be requested to authorize and direct the putting into effect of a policy of appointing manufacturers' representatives to the various requirements committees from representatives selected or endorsed by the Association of Gas Appliance and Equipment Manufacturers. A further suggestion, meeting with general approval of this committee, was that a three-year term of service with one-third of the membership being appointed annually be adopted as a standard procedure for rotating subcommittee personnel. These recommendations were subsequently endorsed by both the Executive Board of the American Gas Association and the Board of Directors of the Association of Gas Appliance and Equipment Manufacturers.

"In line with the action referred to above, the Subcommittee on A. G. A. Requirements Committee Procedure and Personnel held its first meeting on October 26 to consider, among other items, the matter of adopting a definite plan for a periodic change of subcommittee personnel. This group was of the opinion that the only equitable manner in which to start such a plan would be to terminate the present term of office of all subcommittee members at the same time. In line with this thought, the following plan was recommended which, on January 15, 1937, was approved by the A. S. A. Sectional Committee, Project Z21, A. G. A. Approval Requirements Committee:

"1. The term of office of all subcommittee members shall terminate as of July 1, 1937. Notices to this effect prepared over the signature of the chairman of the A. G. A. Approval Requirements Committee shall be mailed to all members at the earliest possible date.

"2. New appointments and reappointments to the various subcommittees shall be for a term of 3 years. In placing the new plan in operation, the first appointments may be made for terms of 1, 2 or 3 years, at the discretion of the chairman of the A. G. A. Approval Requirements Committee, in order not to interfere with the proper and orderly functioning of the committees concerned.

"3. All members of subcommittees, with the exception of manufacturer representatives, shall be selected and appointed by the chairman of the A. G. A. Approval Requirements Committee.

"4. All manufacturer representatives to be appointed or reappointed to membership on subcommittees shall be nominated by the appropriate division or divisions of the Association of Gas Appliance and Equipment Manufacturers and the required number shall be appointed from those nominated by the Chairman of the A. G. A. Approval Requirements Committee.

"5. Subject to the provisions specified above, gas company and manufacturer members of the various subcommittees may be reappointed as of July 1, 1937, or at the end of any subsequent term of office.

"6. When reorganizing subcommittees as of July 1, 1937, or at any subsequent time, and when appointing additional subcommittees, an equal number of gas company and manufacturer members shall be appointed. Subgroups appointed by subcommittees from their own members shall not be subject to this provision where conditions make it impractical to follow such procedure.

"I am confident you will realize that the action taken does not reflect upon the work of any group or individual member. The subcommittee members, without exception, have contributed generously of their time and effort in the preparation of requirements that are nationally recognized.

"In behalf of the Approval Requirements Committee, I wish to express our deep appreciation of the cooperation you have given us in the past, and I trust that we may have the benefit of your cooperation and counsel in the future."

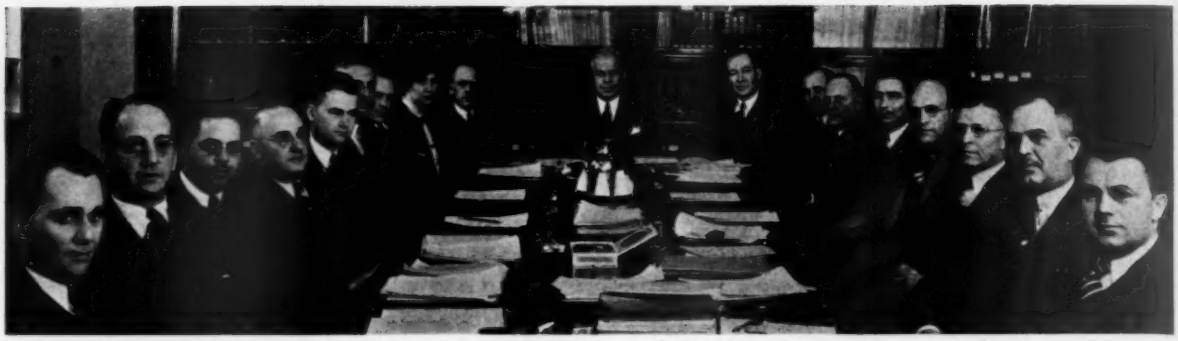
Manufacturers Cooperating

The Association of Gas Appliance and Equipment Manufacturers is giving prompt and active cooperation in the selection of manufacturer representatives for the various subcommittees concerned. At this writing, such representatives have been nominated by the A. G. A. E. M. for four subcommittees including those on approval requirements for gas ranges, water heaters, central heating gas appliances, and hotel and restaurant ranges.

All manufacturer representatives selected who are not at present members of the above mentioned subcommittees are being invited to sit in on meetings of such subcommittees which may be held prior to July 1 in order that they may become familiar with the current activities of these groups. These representatives will, of course, not be privileged to vote until they have taken office on July 1.

There are some 30 requirements subcommittees and subgroups of such committees, which will be affected by the reorganization plan. These include:

1. Subcommittee on Approval Requirements for Gas Ranges, Hot Plates and Laundry Stoves.
2. Subcommittee on Approval Requirements for Gas Space Heaters.
3. Subcommittee on Approval Requirements for Gas Water Heaters and Listing Requirements for Attachable Water Heating Units Without Water-Carrying Parts.
4. Subcommittee on Approval Requirements for Central Heating Gas Appliances.
5. Subcommittee on Power Burners (Subgroup of Subcommittee on Central Heating Gas Appliances).



American Standards Association Sectional Committee, Project Z21, A. G. A. Approval Requirements Committee in session January 15, 1937, at the Testing Laboratories, Cleveland, Ohio. Those in attendence are—left to right: J. W. McNair, American Standards Association; B. B. Kahn, Estate Stove Co.; F. R. Wright, A. G. A. Testing Laboratories; H. E. G. Watson, The Consumers Gas Co., Toronto; W. S. Walker, Consolidated Edison Co. of New York; F. A. Lemke, Ruud Manufacturing Co.; John Mueller, Payne Furnace & Supply Co.; Mrs. Katharine M. Ansley, American Home Economics Association; K. R. Knapp, A. G. A. Testing Laboratories; R. B. Harper (Chairman), The Peoples Gas Light & Coke Co.; R. M. Conner (Secretary), A. G. A. Testing Laboratories; George W. Jones, U. S. Bureau of Mines; W. E. Derwent, Geo. D. Roper Corp.; G. M. Wile, Associated Factory Mutual Fire Insurance Companies; R. H. Cutting, American Institute of Architects; L. B. Wilson, Jr., Consolidated Gas Electric Light & Power Co. of Baltimore; C. C. Winterstein, The United Gas Improvement Co.; W. M. Couzens, A. G. A. Testing Laboritories.

6. Subcommittee on Steel Boilers (Subgroup of Subcommittee on Central Heating Gas Appliances).
7. Cleveland Working Committee on Central Heating Gas Appliances (Subgroup of Subcommittee on Central Heating Gas Appliances).
8. Los Angeles Working Committee on Central Heating Gas Appliances (Subgroup of Subcommittee on Central Heating Gas Appliances).
9. Subcommittee on Approval Requirements for Gas Unit Heaters.
10. Subcommittee on Approval Requirements for Refrigerators Using Gas Fuel.
11. Subcommittee on Approval Requirements for Hotel and Restaurant Ranges.
12. Subcommittee on Approval Requirements for Gas Hair Dryers.
13. Subcommittee on Approval Requirements for Clothes Dryers.
14. Subcommittee on Approval Requirements for Incinerators.
15. Subcommittee on Approval Requirements for Industrial Gas Boilers.
16. Subcommittee on Approval Requirements for Private Garage Heaters.
17. Subcommittee on Approval Requirements for Gas Heated Ironers.
18. Subcommittee on Approval Requirements for Flexible Gas Tubing.
19. Subcommittee on Requirements for House Piping and Appliance Installation.
20. Subcommittee on Listing and Installation Requirements for Gas Conversion Burners.
21. Subcommittee on Listing Requirements for Draft Hoods.
22. Subcommittee on Listing Requirements for Gas Burner Valves.
23. Subcommittee on Listing Requirements for Gas, Pressure, and Temperature Control Accessories.
24. Subcommittee on Relief and Automatic Gas Shut-Off Valves for Use on Water Heating Systems (Subgroup of Subcommittee on Gas, Pressure, and Temperature Control Accessories).
25. Subcommittee on Appliance Thermostats and Automatic Devices To Prevent Escape of Unburned Gas (Subgroup of Subcommittee on Gas, Pressure, and Temperature Control Accessories).
26. Subcommittee on Automatic Main Gas-Control Valves (Subgroup of Subcommittee on Gas, Pressure, and Temperature Control Accessories).
27. Subcommittee on Domestic Gas Appliance Pressure Regulators (Subgroup of Subcommittee on Gas, Pressure, and Temperature Control Accessories).
28. Cleveland Working Committee on Gas, Pressure, and Temperature Control Accessories (Subgroup of Subcommittee on Gas, Pressure, and Temperature Control Accessories).
29. Subcommittee on Listing Requirements for Semi-Rigid Gas Appliance Tubing and Fittings.
30. Subcommittee on Standardization of A. G. A. Requirements (Consists of Chairmen of requirements subcommittees and subgroups).

The reorganization plan previously referred to does not, of course, affect the membership of the A. S. A. Sectional Committee, Project Z21, A. G. A. Approval Requirements Committee, or the subcommittees of that group appointed from its own membership. There are at present three such subcommittees, namely:

1. Subcommittee on A. G. A. Requirements Committee Procedure and Personnel.
2. Subcommittee on Test Gases and Test Pressures.
3. Subcommittee on Publication of Requirements in Non-Technical Form for Sales Aids.

In the past, members of all requirements subcommittees have been selected and appointed by the chairman of the A. S. A. Sectional Committee, Project Z21, A. G. A. Approval Requirements Committee with the approval of the President of the Association. With few exceptions, the personnel of all subcommittees is composed of an equal number of gas company representatives and appliance manufacturers. These engineers were selected with a view to securing representatives from both natural and manufactured gas territories and from various geographical sections of the United States. All groups were standing committees, the duties of which were continuous from year to year. Practically the only changes made in the personnel of these subcommittees were those necessitated by the death of members or by resignations due to members changing their company affiliations. The result has been that many of the subcommittee members have served since the committees were originally organized, extending over periods of from one to eleven years.

The effect of the policy followed in the past has been that committee members are thoroughly familiar with all of the details and problems involved in the development and periodic revision of the standards with which they are concerned. They have followed closely the research and investigations conducted, they have taken part in discussions and debates on nearly every phase of the design, construction and performance of appliances in which they have an interest and have reviewed the comments and criticisms of the industry year after year as requirements were revised, or new ones adopted. In addition to their knowledge of their own companies' problems and business, they have been educated, through years of experience, in the problems facing the entire industry. This background of experience has naturally tended toward the development of sound and practicable standards.

The policy followed heretofore has had

disadvantages, however, since it made no provision for the rotation of committee members such as is provided under the new procedure. This change will permit active participation by a greater number of companies which previously had no final voice in the requirements but could be heard only through submission of written comments on requirements or by appearing before the committees to present their cases in person. Committee action has, of course, often been guided by such comments and it is hoped that both gas companies and manufacturers not represented on the requirements committees will continue to cooperate actively in this work as they have in the past.

The new plan relative to subcommittee personnel will also permit appliance and accessory manufacturers to decide for themselves who shall represent them on the various requirements groups which draft standards for the products which they manufacture. Since the Association of Gas Appliance and Equipment Manufacturers is nominating representatives for one, two, and three-year terms, and thus far has chosen to retain some of those who are at present members of the subcommittee concerned, the work on requirements should continue in an orderly fashion.

One cannot close without paying tribute to the splendid work which our requirements subcommittees have done over the period of the past eleven years. Their untiring efforts and cooperation, both individually and collectively, deserve the highest praise of the industry.

Suffron Becomes Supervisor of Pacific Coast Laboratory

F. O. Suffron

WITH some twenty-three years background in the gas industry and a full service record in the varied Laboratories' research and testing activities, F. O. Suffron took over the supervision of the Los Angeles Branch of the Laboratories early in February.

This move took Mr. Suffron back into the country which is his "native habitat." A graduate of Oregon State in 1915, consulting test engineer for Smith, Emery and Company, San Francisco; distribution engineer, Portland, Oregon, Gas and Coke Company, and valuation engineer for The Washington Gas and Electric Company, was the experience he brought to his research appointment at the Laboratories in 1930. From then until 1933 he was engaged in the pipe joint research program carried on by the Laboratories, including the work on bell and spigot and mechanical joints and welding. During the course of this study Mr. Suffron made an extended trip in 1932 through the oil and natural gas fields in the Midwest and Southwest. This was for the purpose of obtaining first-hand information in regard to problems encountered in the construction and maintenance of transmission and distribution lines. The information secured indicated a definite need for an instrument which could be used for the non-destructive testing of welded joints. This was later developed by Mr. Suffron. The outgrowth of this study was the development of the weld test indicator, which was exhibited and demonstrated at the Distribution Conference of 1933.

In December of 1933 he was appointed as head of the Research Department. During his tenure of this executive position several important research activities were brought to a successful conclusion. Among these should be mentioned "The Effect of Operating Temperatures on the Combustion of Industrial Gas," "The Domestic Gas Range Research" and the "Gas vs. Electricity" investigation.

During the last several years, Mr. Suffron has been in active touch with problems relating to the mixing and utilization of gases particularly in instances where change-overs were made from manufactured to natural gas.

Among his more recent activities may be mentioned the development of a flow meter for indicating gas consumption rates. This was displayed at the recent convention at Atlantic City and created many favorable comments from distribution and utilization engineers.

His wide participation in the varied Laboratories' activities during this time has amply fitted him for his new task. Both appliance manufacturers and gas company representatives will find in him a sympathetic understanding.

Doctor F. A. Vandaveer, who has been on the Pacific Coast for the last four years, returned to the Cleveland Laboratory in February, to again take up his work there as supervisor.

Gas Drilling Pattern

MICHIGAN Public Utilities Commission has adopted an amendment to the regulations governing production of natural gas to provide for drilling one well to every 160 acres instead of 40 acres, the former spacing pattern.

The amendment was adopted on petition by West Michigan Consumers Co., of Muskegon, operator of a natural gas pipe line and distributing system serving about 25 major industries of Greater Muskegon. It won the approval of other operators at a hearing in Lansing.

Though the change recognizes a quarter section as unit for computing the gas to be withdrawn from any well, operators will be permitted to drill gas tests on 40-acre tracts, or less. However, under the new schedule it will be more advantageous to the operator to drill fewer wells and be permitted a greater percentage of open flow withdrawal.

The new rules are to become effective February 1, 1937. The West Michigan company already has changed to the new spacing pattern in the new Ravenna Township, Muskegon County, field, where it controls 11,000 acres in four townships and is now taking gas from eight Berea gas wells and transporting it to Muskegon, about 15 miles, through a $50,000 pipe line laid last fall.

Franchise Tax Reduced

A LESSON for utilities desiring to obtain a reduction in their franchise tax is contained in this month's news from North Carolina. The franchise tax in that State has been 6 per cent on the total gross income of all utilities which was considered excessive by the gas companies. Prior to this year, the larger companies, headed by a lawyer, have appeared before the finance committee of the Legislature seeking a reduction of the tax without success.

This year, however, Charles M. Sturkey, president of the North Carolina Gas Company, Lexington, representing the small independent gas companies, conducted a one-man lobby for nearly a month before the public hearing of the finance committee asking that the tax be reduced to 4 per cent on the first $50,000 and 6 per cent on all income above that amount. He was successful in securing a reduction to 4 per cent on the first $25,000, representing a saving of $500 annually to every gas company in the State. Since seven out of the thirteen companies in North Carolina have an annual revenue under $50,000, this represents a substantial saving.

In reference to the manner in which Mr. Sturkey obtained his goal, the following appeared in the "Political Pinwheel" column of *The Raleigh Times:*

"Probably the only outsider appearing before the finance committee ever to receive spontaneous applause at the end of his talk is Charles M. Sturkey of Lexington. . . . . Sturkey, appearing in behalf of the small, independent gas companies of the State, kept the large crowd of committee members and others in gales of laughter throughout his appearance. . . . . He said that some of the members several years ago were so touched by his pleas of poverty that they offered to pass the hat to get enough money for his return to his home. . . . . When he concluded his talk Friday afternoon, Chairman Webb asked him if he wanted the hat passed this time. . . . . Sturkey thanked Webb, but said he had a friend who was going to take him home. . . . . He was roundly applauded, not only for the wit he demonstrated in parrying questions shot at him, but also for his clear presentation of his case."

Personnel Service

SERVICES OFFERED

Accounting, Auditing, Bookkeeping, Clerical and Office Workers

(Classification records available)

Advertising, Publicity and Public Relations

Advertising executive of wide experience with background of publicity work in the utilities field desires position with a public utility or commercial organization desirous of building good will and increasing appliance or merchandise sales. Specialized in gas fuel and domestic refrigeration campaign work. Salary on results. **1096.**

Display and **advertising artist** now available. Nine years' utility—seventeen years' total experience. Seven years in last position. Thorough knowledge of all phases of utility advertising and display work. A talented producer with a fine record, (38). **1100.**

Chemists, Physicists and Research Workers

(Classification records available)

Engineers

Inventory, valuation engineer for utility and pipe line appraisals, depreciation studies, private investigations and reports made for utilities of special problems. Will go anywhere, single. (39). **1095.**

Gas engineer (B. E. E.) four years of varied experience in production department of an electric utility and four years' erection, maintenance and operation experience in production department of large water gas plant. Cadet engineer and plant foreman. Desires new connection. Married (28). **1113.**

Managers and Superintendents

Experienced gas engineer operator and **manager.** Actual experience coal gas, water gas, transmission and distribution construction, operation and maintenance, chemical laboratory, selling, servicing, and installation of gas appliances, office routine billing, consumer's ledger, collecting, daily and monthly operating and financial reports, and budgets. Invites interview. **1098.**

Manager—With twelve years' experience in the supervision of all branches of the gas business, including **commercial** and **merchandising,** coal and water gas manufacture and distribution and new main and service extensions. Also natural gas production and operation. Present connections such, services available short notice. **1103.**

Twenty-five years' experience in commercial, operating and **executive** departments of public utilities. Gas, transportation, steam heat, electric light and power. Technical education. Successful in handling public and employees and at the same time increasing the gross and net revenue. **1107.**

Manager—Eighteen years' successful **management** experience. Desire connection with all gas property where ability to build load and develop gas business can be aggressively pushed. Past experience covers water, coal and coke oven operation and high, low and intermediate distribution. University trained, married, now employed. (41). **1111.**

Salesmen and Sales Engineers

As **factory representative** and **salesman,** with high grade gas range manufacturer or other gas appliance, approved by the A. G. A. Am familiar with the gas utilities of New York State, their personnel, also dealers. Am a producer and hustler. **1092.**

College graduate (29) single, with over five years' experience on gas **house heating sales,** installation, and service work with gas company. Can make surveys, prepare estimates, supervise installations, and train service men as well as salesmen. Desires position manufacturer or gas company. **1093.**

SERVICES OFFERED

Salesmen and Sales Engineers

(continued)

Fourteen years' experience in gas and coke oven work. Thoroughly trained in operation, maintenance and repairs of coke ovens, producers and water gas plants. Considerable experimental work in this field, including **coke sales.** Desire suitable position with utility and opportunity for advancement. College graduate; married. **1097.**

Man with 20 years' experience with two large gas companies wishes position in distribution, industrial sales or house heating departments. Have been in charge of distribution and industrial **sales** departments and had experience in house heating and winter **air conditioning.** **1099.**

Sales engineer. Graduate engineer, wide acquaintance in the industry, successful background several large companies in construction gas manufacturing plants and utilization of gas; extensive experience in sale of building materials and equipment allied with gas industry. As gas company industrial engineer or with manufacturer of equipment; preferred location East. **1101.**

Manager or assistant in domestic **air conditioning sales,** promotion, advertising or publicity. Six years' editorial experience in that field, backed by years of sales and advertising training, at your command along with initiative, energy and good common sense. Salary within reason. **1104.**

Sales and **engineering** covering all classes of merchandise. Technical graduate, married, with twelve years' successful record in gas industry, desires position with utility or manufacturer in supervisory capacity. Experience covers house heating, industrial, water heating and domestic phases. Acquainted with sales and service methods used by large companies. **1105.**

Industrial gas **sales engineer** six years' experience large Eastern combination company. Broad experience in sales, installation and service of varied industrial appliances as: bake ovens, boilers, furnaces, etc. Familiar with all competitive fuels, preparation of estimates and cost surveys, and economic rate determinations. University graduate, married. **1106.**

SERVICES OFFERED

Salesmen and Sales Engineers

(continued)

Twenty years' experience as executive in small utilities covering management, finance, construction and sales work. Recently represented a national manufacturer of gas equipment as division **sales manager.** Prefer executive or sales work. Will go anywhere on short notice. **1109.**

Sales engineer heating, air conditioning, gas appliances, insulation, sales promotion through dealers; recently with leading Eastern gas utility. Previously in supervisory, responsible positions with important steam and hydroelectric utilities: valuation, operation, maintenance, power distribution experience. Foreign agent for large manufacturing firms. Speaks six foreign languages. Executive qualifications. **1110.**

Fifteen years' experience **sales engineering,** supervision and management natural and manufactured **industrial** gas utilization field. Present employer large utility holding company primarily electric where opportunity advance limited in gas work. Available on short notice. Reliable, sober, industrious, excellent education, experienced, ambitious. Can demonstrate results on sales. **1112.**

Miscellaneous

With gas company anywhere; capable of gas main **construction** or **maintenance,** any class pipe, or the **installation** of modern gas appliances. Understand thermostats and gas refrigeration, water heaters, etc. I have years of experience behind me and can deliver the goods. Footloose and free. **1108.**

POSITIONS OPEN

Householeating engineer for medium size Eastern gas company. Familiar with gas heating equipment, unit heaters, conversion burners and Orsat tests. Age 25 to 35; salary $200.00 per month. **0317.**

ON SELECTING PERSONNEL

We are grateful to the Chairman of the A. G. A. Committee on Personnel Practices, Mr. Eric Nicol, Personnel Manager of The Philadelphia Gas Works Company, for this timely message.

Every executive is aware of the importance of having in his organization the best available people for every job. The American Gas Association has recently appointed a committee to provide the industry with information about personnel practices that may make possible higher standards of performance in the operation of the gas business. In the last analysis these standards are dependent in a large manner upon the success with which selection of employees, whether they be laborers or executives, is achieved.

Jobs do not fill themselves. The employer must seek out the best-qualified man who can bring to the work the necessary training, experience, character, and personality. The employee, in turn, must seek out the job where his qualifications will prove assets. Sometimes,—but not often,—LUCK intervenes and the round peg rolls right into the round hole. More often, however, the square peg squeezes into an uncomfortable space, with resultant dissatisfaction both to the peg and the hole. Such misfits in industry are costly. They might easily be avoided if the seeking process were carried further. If, for instance, he were to carefully analyze the market to learn where might be found a man possessing essential qualities of education, training, experience, and character requisite for the position, he might find sources of supply readily available that will relieve him of a serious problem.

Every advertising man knows that the same medium is not equally successful in selling all products. He, therefore, seeks the most effective medium. This is the logical procedure for those who are trying to fill or find jobs. What more logical source can be found for men needed in the gas industry than through the centralized files of the **Personnel Service** of the American Gas Association. It functions through the use of confidential classification records and keyed advertisement. All correspondence is handled in confidence and with discretion. The name of every company and advertiser is kept confidential unless permission is given otherwise. Every executive can through this medium discuss his problem freely and fully with someone who understands his business and without fear of awkward release at any time.

In addition to the direct benefit that will accrue to each employer securing help from this service there is another advantage which will increase the efficiency of the service and add distinctly to the morale of the employment situation in the gas industry. Advertised vacancies indicate activity and life among member companies. The more good jobs that seem available the more will be the number of applicants who will apply. Thus **Personnel Service** really creates an excellent way of selling the opportunities which continue to exist in our great industry.

As a user of this service and as a member of an important committee of the American Gas Association, which must depend for its work on good selection standards, I have no hesitation in urging every gas company executive to utilize Personnel Service for information regarding supervisory material available or whenever a vacancy occurs which cannot be filled from within the ranks or for which there is not a ready local market. Such cooperation will be amply rewarded.

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